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FOOD PATENTS

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National Information Centre for Food Science and Technology
Central Food Technological Research Institute,
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ENGINEERING AND EQUIPMENT

1 Aseptic food processing apparatus and method.

MARIEN RESEARCH CORP.

United States US 4637931 (1987)

2 An apparatus for incinerating particulate solids.

PRODUCERS RICE MILL

India 160065 (February 1984)

The patent describes an apparatus for the incineration of waste products such as rice and peanut hulls and the control of its ash residue. Operation of the apparatus with rice hulls as the particulate fuel evolves a gaseous exhaust that flows past the infeed location to an upper exhaust duct which delivers an exhaust that is free of fly ash. Hence it is useful as a heating medium for boilers. By control of the uniform weight feed rate of the particulate fuel solids, the heat energy content of the exhaust may be varied to meet different requirements. The carbon content of the ash residue may be varied by adjustment of the underfire inflow rate between firing limits, in order to meet different market requirements for disposal of the ash residue.

3 Particulate material treatment method and apparatus.

SOCIETE DES PRODUITS NESTLE

European Patent Application EP 0207384

4 Extraction process and equipment for foodstuffs.

HEINZ SCHAAF NAHRUNGSMITTEL-EXTRUSIONS TECHNIK

German Federal Republic DE 35 15617 A1 (1986)

5 Process and equipment to fill sausages into jars.

FA FRANK KOOP

German Federal Republic DE 3515965 A1 (1986)

6 Process and equipment to clean a machine for filling e.g. a still beverage into containers, especially a vacuum filling machine.

KRONES AG HERMANN KRONSEDER MASCHINEN FABRIK

German Federal Republic DE 3511078 A1 (1986)

7 A crystallizer.

MI TAL BL

India 158 877 (February 1987)

The crystallizer has an inner and an outer chamber, and some means (e.g. cooling coils) for cooling the inner chamber. The outer chamber is the feed chamber; it has an opening at the lower and in flow communication with the inner chamber; and an outlet in the inner chamber for discharge of the massecuits or mother liquor.

8 A crystallizer.

MITTAL BL

India 158 884 (February 1987)

This crystallizer is an improvement over the one described in IP 158877. It comprises an inner and an outer chamber, in flow communication with each other, a peripheral gutter provided with the said outer chamber, a rotatable shaft within the inner chamber, and a plurality of stirrers held to the shaft and extending into the outer chamber. The massecuite is introduced into the inner chamber, and any overflow is carried away by the gutter in the outer chamber. Means for cooling the massecuite are provided in the outer chamber.

9 A crystallizer for use in sugar manufacture.

MITTAL BL

India 158885 (February 1987)

This crystallizer is like the one described in IP 158884. It consists of an inner chamber, and an outer chamber provided with a peripheral gutter. Means for cooling the massecuits are provided in the outer chamber. In addition, this new invention provides a reheater (for heating the massecuite) which is separate from the crystallizer tank.

10 An improved cane mincer.

WALCHANDNAGAR INDUSTRIES LTD

India 159936 (October 1984)

The patent claims an improved cane mincer for producing fiberized cane mass which comprises of a casing formed by a fixed top and two side plates and an adjustable hinged curved front hood plate and an adjustable hinged backplate enclosing a plurality of operating sectors/regions and a rotor having bearing supported shaft. The present cane mincer is more energy efficient and provides plurality of operating sectors/regions for softening/slicing/hammering/cutting/mincing/fiberizing different varieties of cane sticks to produce high quality fiberized cane mass having high PI (preparatory index) high B.D.(Bulk Density), high fiber lengths, high opening of cells and loss fines

for fiberized cane mass for extracting increased juice yield per ton of crushed cane mass in a juice extraction milk thereby giving higher sugar yield by ton of crushed cane.

11 An improved roll type huller.

RASHINKAR NV (Mrs)

India 158806 (January 1987)

Existing roll type hullers (for hulling rice grains, for example) can be improved by making the shafts of the rollers perfectly parallel. This is achieved by providing supports to the shafts at both their ends, resulting in positive drive to both the shafts by means of gears, thereby ensuring greater efficiency.

12 An improved electric domestic flour mill.

SAVALIA RM

India 158804 (January 1987)

The SAVALIA domestic flour mill has two chambers, an upper and a lower. A fixed energy wheel is housed in the upper chamber and a rotating emery wheel in the lower chamber. The wheels have a diameter of 6" (15 cm) and are 18 mm thick. They are easily replaceable. All parts and components can be taken out and fitted in again, using only one's own hands and fingers, in 90 secs. The hopper to hold the grain that is fed in can hold up to 5 kg of grain. Special fins are provided to cool the machine. Special sweep strips are provided to sweep away all the flour out of the micro-mill, leaving no deposit when the mill is stopped. The mill weighs only 20 kg, and takes up only 0.75 sq.ft. of space.

13 A heater for reheating of the massecuite.

ITTAL BL

India 158474 (November 1986)

The reheater consists of a chamber with a large number of pipes through which is a heating medium is made to flow at high velocity. The chamber is divided into a number of parts of by means of partitions so that the massecuite passes several times from one side of the chamber to the other. The apparatus has a high coefficient of heat transfer, and is very efficient.

14 Method for the utilization of high-pressure steam produced in a pressure vessel, particularly in a domestic cooker and attachments for use therewith.

MUKHERJEE B

India 144813 (July 1978)

The apparatus consists of a domestic pressure cooker with an additional vent located on its lid. A screw-threaded, or slotted, outlet, with an attached conduit pipe is attached tightly to the additional vent. Means are provided for controlling the supply of high pressure steam from the conduit pipe. The high-pressure steam that comes out can be used to prepare items like foamed scrambled eggs, puddings, steamed cakes, etc. in a few minutes. It can also be used to prepare hot cocoa or choco ate, and, especially, expresso coffee.

15 A reflector boosted, box-type, solar cooker of a novel design.

MAJUMDAR D

India 158891 (February 1987)

This box type cooker has a transparent lid and one transparent side, as well as two aluminium refelctors to direct the sun's rays through the lid and the side respectively. The reflector area is not very large (merely 1.5 times the base area of the box). The bottom of the box is inclined at an angle of 10 to the horizontal. The box can be made by village carpenters, using a cheap wood as construction material. The cooker can cook well between 10.00 a.m. and 3.00 p.m., and has a number of auxiliary uses.

PRESERVATION AND PACKAGING

16 Self-venting vapour-tight microwave oven package.

MINNESOTA MINING AND MANUFACTURING CO.

United States 4640838 (1957)

17 Fruit and meat pie microwave container and method.

JAMES RIVER CORP

United States 4626641 (1986)

18 Improvements in or relating to spigots and taps, including the same.

MALPAS CH

India 113508 (June 1969)

The spigots or taps described in this patent are meant to be fitted to containers holding beverages like fortified or unfortified wines, spirits, fruit juices, cordials, or milk. It is designed in such a way that the some of the disadvantages of ordinary taps - viz. thin residual film of liquid within the outlet opening, which may attract flies or get contaminated with dust - are avoided.

19 Process and machine for uniform continuous coating of products such as sweets or cocktail biscuits.
TRANSITUBE PROJET
France 2575639 A1 (1986)

20 Bake in tray and method of forming a blank for the same.
WALDORF CORP
United States 4631046 (1986)

21 Coating composition for foods, such as milk desserts.
COMPAGNIE GERVAIS-DANONE.
Europe 0139570 A1 (1985)

22 Method, equipment and container for processing perishable products.
VEREENIGDE GLASFABRIEKEN NV
Netherlands 8500261 A (1986)

23 Plant and process for defrosting blocks of food products.
TERMIL DI RINALDI SCARLATA
Europe 0207899 A2 (1987)

24 Label indicating the temperature of a product especially food product.
FRANTZ Y
France 2576127 A1 (1986)

25 Packaged food.
UNILEVER NV
Netherlands 8502368 A (1987)

26 Compound food storage bag.
BARNER JS
United States 4629064 (1986)

27 Process and device to wrap flat food products, especially chocolate bars/slabs in a packaging film/foil.
OTTO HANSEL GmbH
Europe 0116062 B1 (1985)

28 Colour indicators of presence of oxygen e.g. in food packs and their composition and manufacture.

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE

France 2586169 A1 (1987)

29 Method and equipment for making packages.

SIG SCHWEIZERISCHE INDUSTRIE GESELLSCHAFT

Switzerland CH 657587 A (1986)

30 A peel off package.

AGRAWAL IP

India 159854 (February 1983)

The patent herein claims a peel-off-package comprising an upper sheet held to a lower or base sheet, one of the sheets having a sealing surface consisting of low density polyethylene, the other having a sealing surface with high molecular high density polyethylene. As both the upper and lower sheet consists of a plastic film or sheet, a greater strength is imparted to the package and sheets do not tear or rupture due to wear and tear. The sealing strength is sufficient so that the seal does not open during handling.

31 Hot beverage containers

NEWCO ENTERPRISES INC.

United States 4638928 (1987)

32 Beverage container.

HESSER H.

German Federal Republic 3505957 (1986)

33 Fiber wound plastic beverage can.

SHELL OIL CO.

United States 4640853 (1987)

34 Beverage can.

SHELL OIL CO

Europe 0213834 A2 (1987)

35 Food can.

ASTNER W

German Federal Republic 3509468 (1986)

36 Plastics bottle.
Societe Bourguignome d' Applications Plastiques
France 2576283 A1 (1986)

37 Container with lid for gas-producing products.
SEPTA AG WILSG
Switzerland 659 228 A5 (1987)

38 Flexible container of variable volume.
SOCIETE CONTINENTALE DU CARTON ONDULE SOCAR
France 2576876 (1986)

39 Closure for a container.
METAL BOX P/C
U.K. 2180228 (1987)

40 A closure cum dispenser for bottles, containers and the like.
SPBP TEA INDUSTRIES PVT LTD
India 160020 (September 1984)

The patent described herein is a closure-cum-dispenser for bottles and containers, the body of which is divided into an upper portion and a lower portion by a partition wall and an opening is provided in the partition wall for discharge of the contents of the bottle. The lower portion of the closure body is provided with internal threads for fixing the closure to the mouth of a bottle and a depending rib is provided below the partition wall to act as a liner for the closure. A cap adapted to be pivotally fitted to the closure body above the partition wall, is designed which has a pair of cradle which rests on the grooves provided with the walls, so as to have a swinging action.

41 Process for packaging milk-based food products and food article comprising one or more individual milk-based portions.
CHOCOLATERIE ABTEY SA
France 2586009 A1 (1987)

42 Stretched opaque polypropylene film to wrap sweets.
HOECHST AG
German Federal Republic 3614398 A1 (1986)

43 Polypropylene multi-layer film.

SUMITOMO CHEMICAL CO LTD

Europe 0203727A2 (1986)

44 Sealable multiply film with low gas permeability and its use as a packaging material.

WOLFF WALSRODE AG

German Federal Republic 3520944 A1 (1986)

45 Container packed with instant food for use in a microwave oven.

HOUSE FOOD INDUSTRIAL CO LTD.

Europa 0200220 A2 (1986)

46 Containers for drinks, especially drinks obtained from fruit.

EDOUARD A

France 2576580 A1 (1986)

47 A carton for packing of products.

INDIRA DEVI VERMA

India 158992 (March 1987)

A five sided carton has been designed for the packing round or oval objects. The lengths of the sides are in the ratios A:0.9A:0.625A: 0.5A;0.125A. The pentagonal figure has 2 right angles and 3 obtuse angles. The box can be used for packing various round objects (bottles etc.) or paste tubes, or objects having a semi-circular cross-section (e.g. half bearings).

48 Package for food portions.

ENTREMONT SA

France 2576881 A1 (1986)

49 A flexible film material, especially for packaging and lid hoods.

SOCIETE ALSACIENNE D' ALUMINIUM.

France 2557026 A1 (1988)

50 Smokable synthetic food packaging film.

KUREHA KAGAKU KOGYO KK

Europa 0216094 A1 (1987)

51 Heat treatment of thermoplastic tubular articles.
METAL BOX p/c
U.K. 2179585 A (1987)

52 Method of manufacturing gas-sealed containered food.
DAIWA CAN CO LTD.
Europa 0092966 B1 (1987)

53 Multi-layer polymeric structure having a moisture sensitive polymeric layer.
AMERICAN CARE CO.
Europa 0059274 B1 (1986)

54 Plastic closure for beverage container.
SUN COAST PLASTICS INC.
United States 4640435 (1987)

55 Cap for carbonated beverage bottle.
WASLEY B
United States 4640426 (1987)

56 Process and device to press sealing inserts (discs) into screw caps for beverage bottles.
WIT HCM DE
Europa 0201144 A1 (1986)

57 An apparatus and a process for manufacturing packages filled with liquid.
TETRA PAK DEVELOPMENT
India 159799 (February 1984)

The patent describes an improved device for the manufacture of packages filled with liquid and includes means for transforming a web of paper having a thermoplastic coating, into a tube which can be advanced in the device with a stepwise motion in a vertically downward direction; with longitudinal and transverse stamping devices, with sealing dies movable in a horizontal direction; with a pair of cutting blades; and with rotatable supporting plates. The device assures exactly measured out quantities of the material to be placed in the packages and provides a fold in the packages at the desired places.

58 A thermoplastics container having a body with a standing base.

METAL BOX CO

India 160134 (March 1984)

The patent claims a container made of thermoplastics resin material which has an application to screw-top bottles for carbonated beverages. The container has a body with a standing base which is formed with a central recess and a standing ring having an outer wall and an inner wall joined with an inverted crest. This inverted crest, which defines the periphery of the recess, controls the distortion of the base against internal pressure of the container.

59 A blank for forming flat top end closure for a liquid carrying paper board container.

EX-CELL-O CORPORATION

India 159865 (August 1988)

The patent describes a blank for forming flat top end closure for a liquid carrying paper board container comprising of four side panels first and second pairs of top closure panels alternately connected by respective horizontal score lines to the top edges of the four side panels as extensions. This flat top container may be stacked more readily during shipping than the conventional one. The flat top closure can be easily opened by virtue of the two lift tabs integrally formed thereon. The use of the lift tabs eliminates any need to handle the pouring lip, thereby permitting the latter to retain its sanitary characteristics.

60 An improved closure having triple pilfer-resistant seals for container orifice/neck ring and the like.

PRECISION MOULDINGS PVT LTD.

India 158758 (January 1987)

The improved pilfer-resistant closure, having triple pilfer-resistant seals, makes it extremely difficult for anyone to reach the contents of the container, without disfiguring or damaging the closure. The closure also has a collapsible spout for draining out liquid contents of the container, without spilling.

61 A pilfer-proof container and closure assembly.

PARLE PRODUCTS PVT LTD.

India 158832 (January 1987)

The closure assembly comprises a container with a neck and mouth at its top surface and a closure for closing the mouth. The outer end (or free end) of the neck is beaded, and provided with at least a pair

of spaced apart, outwardly projecting members. Each member has one weakening line (a series of perforations) across its length. The assembly may be made of tin-plate, or black plate, or pickle cold-rolled cold-annealed (pcrea) plate, or of plastic (PVC, PE or polystyrene).

62 Process for the production of packaged baked products, dough products or the like.

DYNAMIT NOBEL AKTIENGESELLSCHAFT OF POSTFACH

India 160135 (March 1984)

The patent described relates to long-term storage products like packaged baked products, dough products, etc. which possess a compact sealing formed of acetoglyceride preparations over the packaging. It also relates to the use of meltable acetoglyceride preparations for the production of the sealing-in on pre-packaged baked products. The sealing with the covering material achieves a maintenance of the sterility provided for the baked products. The advantage of the covering material is long term resistance to water; resistance against sea water; unchanging stability under tropical conditions and space travel conditions; and the maintenance of the fresh condition of the baked products for longer periods.

63 Improved boxes and box blanks.

LIN PAC CONTAINERS INTERNATIONAL LTD

U.K. 2181388 A (1987)

64 Sterile bag-in-box filling and removal system.

INTERNATIONAL FLAVOURS AND FLAGRANCES IFF DEUTSCHALDN Gmbh

Europa 0190757 A2 (1986)

65 Process for producing cup-shaped packs for food products.

KIMEL MMA

France 2554786 A1 (1985)

66 Wooden tray especially for packaging of fruit and vegetables.

OLIVIA H

France 2576875 A2 (1986)

67 Packaging for bulk goods with a recloseable opening.

TETRA PAK DEVELOPMENT SA

Europa 0052261 B1 (1986)

68 Process and apparatus for the aseptic packaging of products such as foodstuffs and pharmaceutical products.

UNILEVER Nv

Europa 0095812 (1986)

CHEMISTRY AND ANALYSIS

69 Pudding composition and process for preparing puddings thereform.

NABISCO BRANDS INC.

Europe 0209250 A1 (1987)

70 Food processing method to avoid non-enzymatic browning.

THOMAS J LIPTON INC

United States 4640840 (1987)

71 A process for the preparation of a food product.

JOHN WYENTH

India 160056 (1985)

The patent claims a process for the preparation of a food product adopted for human infant nutrition. The product has a fat composition that contains: palm oil; an oil selected from olive oil and oleic oil; an oil selected from coconut oil, babanu oil and palm kernel oil; an oil selected from soybean oil, corn oil, sunflower seed oil, cotton-seed oil and safflower oil; and if desired, upto 2% calculated on the weight of the fat composition of a lecithin.

72 Method and composition for smoking comestible products and smoked products produced therewith.

GRIFFITH LABORATORIES

United States 4637307 (1987)

73 Foamed products.

BRITISH FOOD MANUFACTURING RESEARCH ASSOCIATION

U.K. 2179043 A (1987)

74 Process for producing fried food and device therefor.

SAKUMA K

Europa 0212876 A1 (1987)

75 Process for preparing coated living cells for biotechnological use.

PURAND M

France 2586256 A1 (1987)

76 Process for making an improved instant filling mix.

GENERAL FOODS INC.

United States 4636397 (1987)

77 A process for the preparation of pure D-galactose from green *Aegle marmelos* fruit gum.

CSIR

India 158940 (February 1987)

The gum obtained from green *bael* fruits is subjected to a two-step acid hydrolysis, first with a mild acid (concn. 0.005 to 0.75N) to obtain D-galactan, and then with a strong acid (3-8% w/w), and separating the pure D-galactose by known methods. If 0.1N sulphuric acid is used, the yield of pure D-galactoan is 5-6 g/bael fruit, as compared to an yield of 3-4 g/bael fruit obtained with 0.2 N HCl. The maximum yield of pure D-galactose is 50-55% with 4% (w/w) H_2SO_4 and 25-30% (w/w) with 5% HCl.

78 A process and apparatus for preparing honey having a low water content from crude honey.

CHEURON RESEARCH COMPANY

India 160128 (June 1987)

An apparatus and a process for removing excess water from crude honey having a water content of below 18% by weight has been described in this patent. This is done by filtering crude honey; contacting the filtered honey as a thin film with a non turbulant stream of air having a temperature of from 40 to 75 C at a velocity of less than 5 meters per sec for a time sufficient to reduce the water content; and removing the dried honey therefrom. The apparatus comprises of a housing for holding the honey, a horizontally positioned rotatable shaft within the housing having a rotatable body with high surface area mounted therein and means for rotating the shaft and the high surface area body.

79 An improved process for the preparation of protein isolates from vegetable protein sources.

TEXAS A&M UNIVERSITY SYSTEM

India 159931 (December 1983)

The patent describes a process for the preparation of protein isolates having improved physical characteristics such as colour, nutritional value and/or palatability (including flavour, taste/and or

odour) from vegetable protein sources such as vegetable meals and flours. The vegetable protein source is contacted with alkali to extract protein therefrom and the resulting aqueous protein extract phase is thereafter precipitated with acid to produce a protein isolate.

80 Improvement in or relating to the process for the preparation of 5,6-Dihydro-2-Methyl-N-phenyl-1,4-Oxathiin-3-Carboxamide.

RECKITT AND COLMAN OF INDIA LTD

India 160052

The process involves converting acetoacetanilide to chloriacetoacetanilide by reacting the same with sulphuryl chloride in presence of a solvent such as toulene, The obtained chloroacetoacetanilide is reacted with mercaptoethanol in presence of a base such as sodium acetate or sodium hydroxide and a solvent such as ethanol or methanol and then cyclized by dehydration in presence of a catalyst.

FOOD ADDITIVES

81 Esters of alkyl thio alkanoic acids.

INTERNATIONAL FLAVOURS AND FRAGRANCES INC

United States 4631194 (1988)

82 Edible material containing meta-hydroxy benzoic acid or salts.

BARNETT RE

United States 4627987 (1986)

83 Salt substitute composition.

NABISCO BRANDS INC.

Europa 0124254 B1 (1987)

84 Food composition for use in product preparation or decoration.

VITROCULTURE SA

Switzerland 658974 A (1986)

85 Cocoa powder substitute made from beetroot for use in coatings, fillings, confectionery and beverage powders.

VEB FORSCHUNG AND RATIONALISIERUNG.

German Democratic Republic 226763 (1985)

86 Production of a natural mushroom flavour concentrate.
OBERLAND PILZKULTURAN GmBH
German Federal Republic 3524473 A1 (1987)

87 Process for the production of citrus flavour and aroma compositions.
PROCTER AND GAMBLE CO.
United States 4647466 (1987)

88 Uses of methyl phenyl pentanol derivatives in augmenting or enhancing the aroma or taste of consumable materials.
INTERNATIONAL FLAVOURS AND FRAGRANCES INC.
United States 4632831 (1986)

89 A fast-cook-continuous process for production of ammonia caramel colour.
WILLIAMSON CO INC.
Europa 0213266 A2 (1987)

90 Process for production of concentrated salt stable and beer stable ammonia caramel colour under super atmospheric pressure conditions.
WILLIAMSON CO INC.
Europa 0212049 A2 (1987)

91 Heteropolysaccharide and its production and use.
MERCK & CO INC.
Europa 0211506 A1 (1987)

92 Low-acetyl gellan gum blends.
MERCK & CO INC
United States 4647470 (1987)

93 Cyclodextrin inclusion compound and process for its preparation and use.
SEIWA TECHNOLOGICAL LABORATORIES LTD.
Europa 0215169 A1 (1987)

94 Process for the manufacture of a sweetener based on milk and a sweetener manufactured according to the process.
ARLA
Europa 083325 B1 (1987)

95 Sweetening composition.
COLLIOPOULOS JA
United States 4631195 (1986)

96 Foodstuffs containg 3-aminobenzene sulfonic acid as a sweetener inhihitor.
GENERAL FOODS CORP
United States 4642 240 (1987)

CEREALS AND MILLETS

97 Internally flavoured hulled cereal grain and process for preparation.
MAY WA
United States 4640842 (1987)

98 Process for producing improved dehydrated rice and product.
LOUISIANA STATE RICE MILLING CO INC
United States 4649 055 (1987)

99 Parboiling rice.
MARS INC
UK (1986)

100 Method of improving quality of wheat flour.
HOUSE FOOD INDUSTRIAL CO LTD
Europa 0096897 B1 1987)

PULSES, OILSEEDS AND NUTS

101 Method for the preparation of textured soybean draff.
NATIONAL FOOD RESEARCH INSTITUTE
United States 4642241 (1987)

102 Sunflower products and methods for their production.
SIGCO RESEARCH INC
United States 4627 192 (1986)

103 Roasted honey coated nut product and method for making the same.
HOOVER MW
United States 4647 463 (1987)

TUBERS VEGETABLES AND FRUITS

104 Method of preserving chopped vegetables.
FELIX AM
France 2582484 A1 (1986)

105 Process for reducing the level of objectionable flavours in vegetable protein by microorganism contact.
RALSTON PURINA CO
United States 4642236 (1987)

106 Frozen cauliflower product and treatment method.
PILLSBURY CO
United States 4647462 (1987)

107 Method for extraction of carotene from carrots and the resultant carotene concentrate.
AROMES DE BRETAGNE SA
France 2575748 A1 (1986)

108 Preserve of radish and process for preparation thereof.
AXLE PLAN CORP.
Europa 0210069 A2 (1987)

109 Method of production of garlic paste.
MEIJI SEIKA KAISHA LTD
United States 4649 052 (1987)

110 Apparatus for consistency control of manufactured tomato pulp.
CAMPBELL SOUP CO
United States 4650582 (1987)

SUGAR, STARCH AND CONFECTIONERY

111 A process for the pretreatment of molasses.

CENTRAL DISTILLERY AND BREWERIES LTD

India 160015 (August 1983)

A process for the pretreatment of molasses for use in the step of fermentation for the preparation of alcohol which comprises in diluting the molasses to have a solid content of less than 40% to form a wash, adding a known acid to the wash characterized in that the wash upon addition of the acid has a pH of 1.5 to 4.5 and adding a flocculating agent to the wash for removal of the sludge from the wash.

112 Process for the continuous production of sugar crystals from sugar juices by vacuum evaporation.

FIVES CAIL BABCOCK

India 160122 (July 1984)

The patent describes the continuous production of sugar crystals from sugar juices by vacuum evaporation according to a process which comprises introducing a seeding magma formed by a mixture of concentrated syrup and small crystals into the first of a series of cells that communicate with one another. This mixture is successively passed through all the cells, where the under-saturated sugar juice is added and where it is heated so as to maintain the syrup by evaporation in a state of over-saturation, The cells are usually formed by a horizontally arranged tank which is divided into compartments by means of transverse and vertical partitions. The invention permits the continuous and economical production of a mixture of syrup and crystals intended to be fed to a continuous crystallisation apparatus.

113 Process for treating carbohydrate.

PENTLANDS SCOTCH WHISKY RESEARCH LTD.

U.K. 2181444 A (1987)

114 Cold water swelling starch composition.

STALEY MANUFACUTRING CO

United States 4634 596 (1987)

115 Starch derivatives forming reversible gels.

NATIONAL STARCH AND CHEMICAL CORP

United States 4626 288

116 Process for preparing tofu.

HOUSE FOOD INDUSTRIAL CO LTD

United States 4645681 (1987)

117 Process for producing a Kola flavoured chewing gum composition.

WARNER-LAMBERT CO

India 160103 (March 1984)

THE patent claims a process for producing a Kola flavoured chewing gum composition. The enhancement in Kola taste in a chewing gum is done through the addition of the combination of natural kola extract with an artificial Kole flavour. The gumbase used may be any water insoluble gum bare which contains elastomer solvents to aid the softening of the rubber component. The adding of the kola extract to the gum base mix before the addition of the primary flavour oil helps in the uniform distribution of the extract, throughout the gum base matrix and assures proper release of the same during chewing resulting in a synergestic flavour effect with the flavour oil.

118 A method for producing an ice confection product and ice confection product.

UNILEVER NV

Europa 0201143 (1986)

119 Spoon lollipop.

JOUSSELIN D

France 2576184 A3 (1986)

BAKERY PRODUCTS

120 Process and equipment to prepare dough.

DIERKS AND SOHNE GMBH & CO

Europa 0191288 A2 (1986)

121 A frozen dough for bakery products.

GENERAL FOODS CORP.

Europa 0114451 B1 (1987)

122 Composition for pasta products.

CHIMIROV YU I

USSR 1165349 (1985)

123 Dough shaping technique.

UNION OF SOVIET SOCIALIST REPUBLICS

USSR 1220597 A (1986)

Production of unleavened dough.
BARANOV VS
USSR 1165338 (1985)

Sugar-free cheese cake filling and dry mix for preparation thereof.
NABISCO BRANDS INC
Europa 0216437 A2 (1987)

Cookie dough and preparation of cookies therefrom.
PROCTER
Europa 0055577 (1986)

Packaged cake mix.
BALMORAL BAKING CO LTD
U.K. 2179838 A (1987)

Manufacture of cider bread.
DEFER DYR
France 2585926 A1 (1987)

Preparation of improved bread with γ-glutamyl transferase.
[illegible] LTD
[illegible] (1987)

Frozen pizza with low fat pastry crust.
QUAKER OATS CO
United States [illegible] (1987)

[illegible] for drying semolina and granular products.
[illegible]
[illegible] A1 (1986)

[illegible] to produce torte pieces.
[illegible]
[illegible] 3511311 A1 (1986)

[illegible] alpha-amylase concentrates for use in baking.
[illegible]
[illegible] (1987)

134 Packaging of baker s yeast.
PACA INDUSTRIES LTD
Europa 0201616 A1 (1986)

135 Yeast strains, method of production and use in baking.
UNIVERSAL FOODS CORP.
United States 4643901 (1987)

136 Savory, flavoured baking chips.
SCM CORP.
United States 4643907 (1987)

MILK AND DAIRY PRODUCTS

137 Milk and yoghurt with normal or reduced calcium content and increased magnesium content.
LABORATORIES MERAM SA
France 2552631 (1985)

138 Production of a milk protein composition preferably for use in the meat industry.
VDGB KOMBINAT MILCHWIRTSCHAFT
German Democratic Republic 239941 (1986)

139 Cream powder.
UNITED KINGDOM MILK MARKETING BOARD
United Kingdom 2176088 (1986)

140 Instant creaming powder.
MORINGA MILK INDUSTRY CO LTD
United States 4632832 (1986)

141 Pack especially for packaging butter.
LAITERIES E BRIDEL
France 2565211 A1 (1985)

142 Hard butter savoury coatings.
SCM CORP.
Europa 0208791 A1 (1987)

143 Process and equipment for treating cheese milk.
PIERRE GUERIN SA
Europa 0192509 A1 (1986)

144 Stackable plastics box for cheese.
BERTIN JJ.
France 2547561 A1 (1984)

145 Enhancing taste of a cheddar cheese flavoured foodstuff.
INTERNATIONAL FLAVOURS AND FRAGRANCES INC.
United States 4471002 (1984)

146 Packaging method for cut cheese and package thus obtained.
GRACE SARL
Europa 0206843 A1 (1986)

147 Process for making cheese with ripening in an acidic liquid.
FROMAGERIE L GALLAI
France 2555023 A1 (1985)

148 Process for improving the cheese making capacity of milk used for soft cheese manufacture.
ROUSSEL-UCLAF
Europa 0093663 B1 (1986)

149 Package, particularly for soft cheese.
RAYMOND MORIN SA
France 2585624 A1 (1987)

150 Method for automatic measurement and control in curd making process.
SNOW BRAND MILK PRODUCTS CO LTD
Europa 0213966 A2 (1987)

152 Process and plant for the manufacture of a sweet comprising ice cream and sponge cake.

ITALGEL SPA

Europa 0207006 A2 (1986)

153 Icecream dessert and mix, method and equipment for its manufacture.

BOTTERBLOOM MILCH & EISKREM EG

German Federal Republic 3521538 A1 (1986)

154 Protective bulk pack container for icecream cones.

LOWRY B

United States 4640418 (1987)

MEAT, FISH AND POULTRY

155 Meat processing.

ASHMOUNT LTD

United Kingdom 2176990 A (1987)

156 Method of processing meat for inclusion in high acid type food and product thereof.

CAMPBELL SOUP CO

United States 4636393 (1987)

157 Process for quick-freezing of meat.

TADAAKI SAKAI

United States 4654217 (1987)

158 Packaging of fresh meat.

BUNZL FLEXPACK LTD

Europa 0116394 B1 (1987)

159 Portable container for meat.

BAUER N

German Federal Republic 3515728 A1 (1986)

160 Manufacture of meat extract.

VEB SPEISENPRODUKTIONSBETRIELS

German Democratic Republic 227 878

161 Process for the production of meat-like foodstuffs.

AJINOMOTO GENERAL FOODS PROTEIN INC.

India 158967 (February 1987)

Meat like products from materials of vegetable origin can be produced by moulding and heating a three-component mixture, consisting of: (1) an oil-in-water emulsion having a compression oil-releasing ratio of atleast 15% and composed mainly of protein, fats and oil, and water in the ratio 1:7-40:1-20; (2) a fibrous protein prepared by kneading a mixture of a vegetable protein containing substance and water, and orientating the resultant mixture by applying shear stress in a heated state, and thereafter splitting it; and (3) a binder (either a protein, a gum, or starch)

162 Meat pastes and process for preparing them.

LEMBOURG G

France 2576186 A1 (1986)

163 A method and a system for peeling crustaceans.

OTTO DITLER HANSEN

India 158996 (March 1987)

Crustaceans, like shrimp or even krill are first boiled, and then sent into a chamber where they are heated and/or kept under pressure, for a short time. They are then transferred to a second chamber maintained at a notably lower pressure (partial vacuum), so that the body fluids within the crustaceans come to a boil and loosen the shells. The crustaceans are then forced into a third chamber filled with a brake liquid (e.g. water). The friction caused thereby is sufficient to peel of the shells. If the shells are incompletely removed, the crustaceans may be recycled through the apparatus.

164 Method and equipment for processing shrimps on board factory ships.

CORNELIS KILA R

Netherlands 8500045 (1986)

FRUIT JUICES AND SOFT BEVERAGES

165 Fruit juice containing diet beverage.

PROCTER AND GAMBLE CO

Europa 0210695 (1987)

166 Improved fruit flavoured beverages.
GENERAL FOODS CORP.
Europa 0117047 B1 (1987)

167 A natural juice product containing fruit flesh.
SEIDEL W
German Federal Republic 3515481 A1 (1986)

168 Lactic fermentation production process for diabetic vegetable juices.
VEB HAVELLAND BEELITZ
German Democratic Republic 240126 (1986)

169 Improved process of making citrus fruit juice containing pulp.
NEVATIA BK
India 159945 (December 1984)

The process herein described comprises the steps of removing the outer skin of the fruit to get individual pieces whose inner skin is removed by treatment with a 0.5% to 4% solution of hydrochloric acid. The pulp is separated from the seeds by means of a mechanical vibrator provided with a screen, adding such ingredients as citric acid sugar, glucose, fructose, standard flavouring agents and permissible colours in the 0.5% to 2.5%. The mixture is heated at a temperature of 80 to 100 C and the juice is filled into containers while hot, sealed and thencooled to 0 to 10 C.

170 New food product based on concentrated grape juice and its production.
SOCIETE BITERROISE DE VINIFICATION SOBIVI
France 2563701 A1 (1985)

171 Method and compositions for chill proofing beverages.
SIEBEL SONS CO INC
United States 4636394 (1987)

172 Protein-free coffee whitener.
SOCIETE DES PRODUITS NESTLE SA
Europa 0213406 A2 (1987)

173 Process for making a reduced density roast and ground coffee.
PROCTER AND GAMBLE CO
United States 4637935 (1987)

174 Improved method for aromatizing soluble coffee.
GENERAL FOODS CORP
Europa 0213247 A1 (1987)

175 Coffee maker.
KATAOKA AND CO LTD
Europa 021517 A1 (1987)

176 Coffee oil treatment.
SOCIETE DES PRODUITS NESTLE SA
Europa 0139849 B1 (1986)

177 Decaffeination of tea.
TROSTBERG AG
German Federal Republic 3515740 A1 (1986)

178 Production of granulated concentrated tea.
INSTITUT BIOKHIMII RASTENII AN
USSR 1194363 A (1985)

179 Stabilized honey drink and process for obtaining it.
GAEC DE LA NONE COLLINET
France 2575903 A1 (1986)

SPICES AND CONDIMENTS

Nil

FATS AND OILS

180 Fat composition.
UNILEVER NV
Europa 0209327 A2 (1987)

181 Method for extraction of a lipid from a lipid containing material.
FRIENDRICH JP
India 159020 (March 1987)

Super-critical CO_2 is used to extract lipid from a lipid containing (e.g. various oilseeds, cereal germs and animal by-products) at temperatures ranging from 60 to 100 C and under pressures ranging from 550-1200 bar. The solubility of the lipid in the solvent is greatly enhanced by a factor of upto 4 by employing the very high pressures mentioned above. The process is both efficient and economical and reduces the time, energy, and quantity of solvent required for lipid extraction.

182 A new process technology for the production of vanaspati like nutritious modified fat of desired PUFA (poly unsaturated fatty acid) level and varied glyceride composition, directly from commercially refined oils and fats by inter-esterification under the catalytic influence of sodium methylate powder.

BHATTACHARYYA DK

India 160025 (September 1984)

The patent describes a process of interesterification of glyceride oils, starting directly from commercially refined oils and fats, to produce modified fat having randomly rearranged glyceride composition, rich in PUFA (poly unsaturated fatty acid) content, free from trans isomer, having desired plasticity and presence of EFA (Essential Fatty Acid) as required for better nutrition. This is done by pretreating the oil with dil solutions of NaOH till the FFA (Free fatty acid) content of the oil becomes neutralized; drying the oil by heating under vacuum and adding 0.05-0.1% $NaOCH_3$ on the dried oil at required temperature with continuous stirring.

183 Production of oil and fat emulsions/

VEB KOMBINAT OL UND MARGARINE

German Democratic Republic 237608 (1986)

184 A process for the solvent fractionation of palm oil stearines and products obtained with said process.

SOCIETE DES PRODUITS NESTLE SA

Europa 0081881 B1 (1987)

185 A process and apparatus for preparing mustard oil of a high degree of pungency.

KRISHNAMURTI BG

India 158719 (January 1987)

Mustard seeds are first pulverized in a pulverizer fitted with knife-edge beaters. They are then fed into an apparatus (called pungency promoter) wherein they are treated with steam, under agitation. This treatment increases the isothiocyanate content of the mustard seed powder. The isothiocyanate-enriched powder is then pressed in a

double-chamber expeller fitted with hollow worm blocks to press out the oil. Cold, or even chilled, water is circulated through the blocks to cool the expeller and ensure that the temperaure of the expelled oil remains in the range of 30 to 40 C. Thus, the essential oil, formed in the mustard oil, does not get evaporated, and combines with the edible mustard oil coming out of the expeller.

DIETETIC AND PROTEIN FOODS

186 Food products for babies and infants.

DEXTER NC

France 2586341 A1 (1987)

187 A milk preparation suitable for diabetics and lactose - in tolerant persons and a process for preparing it.

VALIO MEIJERIEN KESKUSOSUUSLIIKE

Europa 0203706 A2 (1986)

188 Dietetic frozen desserts containing aspartame.

WOLKSTEIN M

United States 4626441 (1986)

189 Bland protein concentrates from peanuts and process for making.

MORSE CAPITAL CORP.

United States 4650857 (1987)

190 A food product having a high fibre content and a process for producing the food product.

WARNER-LAMBERT CO

Europa 0128666 B1 (1987)

191 A process for the manufacture of silica.

GROVER PD

India 159017 (March 1987)

A process for the manufacture of pure silica from agricultural wastes and residues - such as paddy husk is described in this patent. It comprises carbonization of the waste in the presence of superheated steam, whereby the steps of pyrolysis and gasification are carried out simultaneously, at a temperature below 700 C. The gases produced by this step are scrubbed and recycled to recover the heat of pyrolysis, which may be used for the parboiling of paddy. The

solid residue left behind is a pure silica that is completely or substantially free from carbon and other impurities, and may be used for manufacture of pozzalana cement.

192 Aluminium treated proteins.
CENTRAL SOYA INC
Europa 0083175 B1 (1987)

193 Improved protein hydrolysate.
UNILEVER NV
Europa 0209921 A1 (1987)

194 High bran snack.
NABISCO BRANDS INC
Europa 0211732 A1 (1987)

195 Low fat content food chips and method of preparation.
BORDEN INC.
United States 4640843 (1987)

MICROBIOLOGY AND FERMENTATION
(including Alcoholic Beverages)

196 Alcoholic drinks and their manufacture.
UNION DE BRASSENES
Europa 0078226 B1 (1986)

197 Production of dried malt and barley meal for use in wort manufacture.
VEB GETRANKEKOMBINAT NEUBRANDENBURG
German Democratic Republic 239542 (1986)

198 Making wort of low fermentability.
SCOTTISH AND NEWCASTLE BREWERIES PlC
United Kingdom 2181450 A (1987)

199 Production of 'Nune' red sparkling wine.
NALBANDYAN LM
USSR 1221237 (1986)

200 Alcohole-free wine and its manufacture.

JOSEPH E SEAGRAM AND SONS INC.

United States 4643083 (1987)

INFESTATION CONTROL AND PESTICIDES

201 Pesticidal granule.

PHILIPS GLOELAMPENFABRIEKEN NV

India 114700 (July 1969)

The pesticidal granule described herein has a core consisting of an active compound, with or without a solid, inert carrier material, binders, surface-active agents, lubricants, and stabilizers. This core is surrounded by a layer which consists, predominently, of titanium dioxide (TiO_2). Method of preparing such granules has been described.

202 A process for preparing flowable aqueous pesticide composition of improved activity.

DIAMOND SHAMROCK CORPORATION

India 145206 (October 1987)

The patent describes a method for preparing an aqueous, flowable pesticide concentrate of improved activity which comprises wet-milling together in an aqueous medium. To prepare the composition, an active ingredient, dispersants and other optional components are homogenously ground together in the aqueous medium in a chamber by the shearing action of rotating metal balls in contact therewith. Any commercially available wet-milling equipment which has a pumping system to maintain circulation of the mix during the grinding process could be used herein. A wet milled pesticide composition blended by this process is more uniform in size, is more evenly distributed and has more small particles, on a volume (or weight) basis, than any other blended formulation. It exhibits much improved fungicide activity over the physically blended formulation.

203 A process for preparing Triazole derivatives.

PFIZER CORPORATION

India 160173 (August 1987)

This patent describes a process for preparing novel triazole derivatives which have antifungal activity and are useful in the treatment of fungal infections in animals, including humans and as agricultural fungicides. The pesticidal compounds may be applied in the form of dusting powders, or granules, seed dressings, aqueous solutions, dispersions or emulsions, dips, sprays, aerosols or

smokes. They can be applied directly to the plant foliage, stems, branches, seeds or roots or to the soil or other growing medium. They may be used not only to eradicate disease, but also prophylactically to protect the plants or seeds from attack.

204 A process for the preparation of pyrethroid insecticide esters.

SHELL INTERNATIONALE RESEARCH MAATSCHAPPIG BV

India 158971 (February 1987)

Synthetic, pyrethroid insecticides of the cyanobenzyl cyclopropane carboxylate type have been prepared by reacting a cyanobenzyl arylsulphonate with a cyclopropane carboxylic acid.(See also IP 143782).

205 A process for the manufacture of 2,4-Dichloro-5-Pentadecyl phenoxyacetic acid.

CSIR

India 160170 (June 1987)

A process for the preparation of 2,4-dichloro-5-pentadecyl phenoxyacetic acid from naturally occuring cardnol has been described in this patent. This aryloalkyl carboxylic acid is useful as fungicide, weedicide and herbicide in pesticide chemistry. It is a simple, suitable convenient economic process for the synthesis of the acid with quarternary ammonium salt as a catalyst. The process is free from any side reactions.

206 Method for preparing sugar-free rodenticidal compositions.

VELSICOL CHEMICAL CORPORATION

India 158810 (January 1987)

The rodenticide compositions described in this patent consists of: grain 70-95% by wt., vegetable oil 1-10%, artificial sweetener 0.1-3.0%, and a toxicant, 0.005-0.01%. The artificial sweetener (used in place of sugar) improves the acceptability of the rodenticide, and stabilizes the initial amount of active ingredients in the composition.

207 Process for preparing formamidoxime derivatives.

NIPPON SODA CO LTD

India 158923 (February 1987)

The invention relates to a process for the preparation of novel formamidoxime derivatives, and salts or complex thereof; such compounds are then combined with inert carriers or solvents to form fungicidal, insecticidal, and/or acaricidal compositions which are effective against mixed fungi, and chemically resistant fungi that attack crops.

208 An applicator for use in pest control.

DR WERNER FREYBERG CHEMISCHE FABRIK

India 160123 (July 1984)

The patent describes a sachet or small bag adapted for accommodating a gas-evolving pest control agent. The sachet is manufactured from a specially selected non-woven fabric. The interstices between the long fibres of the higher melting component are occupied by the lower melting component in the form of the shorter fibres which will then improve substantially the desired dust proofness of the sachets. The porosity of the non-woven fabrics is such that on the one hand gases may pass there through quite easily, whereas the passage there through of dusts such as are formed by the hydrolysis of the pest control agent is blocked. Thus no residues of the pest control agent escape from the sachet. The invention is also applicable to multiple sachets comprising several pockets. The advantages of the sachet residues in its property of virtually complete gas permeability combined with its ability to retain the pest control agent even when decomposed; its improved durability; and an extremely low moisture content.

WASTE UTILIZATION

Nil

I N D E X

Acetoacetanilide (conversion to) chloro-acetoacetanilide 80
Acid type roods (use of) processed meat 156
Acidic liquid (for) cheese ripening 147
Alcoholic drink 196-200
Alkyl thioalkanoic acid esters 81
Alpha amylase concentrate (in) baking 133
Aluminium treated protein 192
3-aminobenzene sulfonic acid (as) sweetener inhibitor 96
Ammonia caramel colour 89
Aqueous pesticide composition 202
Aromatization, coffee 174
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Bael fruit-green, D-galactose preparation 77
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  (with) closure/dispenser 40
  (with) screw caps 56,58
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Cheese milk, treating process 143
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Cheese-soft, package 149
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Pilfer-resistant closure (for) container 60
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  closure (for) beverage container 54
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209 Dryer and drying method.
SOCIETE DES PRODUITS NESTLE SA
Europe 021441 (1987)

210 Spray drying apparatus and method.
DAIRYMAN'S COOPERATIVE CREAMERY ASSOCIATION
Europe 0223509 (1987)

211 Method and apparatus for producing microfine frozen particles.
TAIYO SANSO CO LTD.
European Patent Application 0225081 A1 (1987)

212 Continuous vacuum grinding method and apparatus.
MARLEN RESEARCH CORP.
European Patent Application 0218790 A1 (1987)

213 Process and device to separate off groups of disk-shaped products from a supply stack.
SIG SCHWEIZERISCHE INDUSTRIE-GESELLSCHAFT
Swiss Patent CH 661 018 A5 (1987)

214 Equipment and process for continuous aerobic or anaerobic fermentation.
COMMISSARIAT a l'ENERGIE ATOMIQUE
French Patent Application 2588 271 A1 (1987)

215 Moulding food.
ALFA-LAVAL CHEESE SYSTEMS LTD
United Kingdom 2179586 (1987)

216 Polyamide molding material and hollow-molded body obtained therefrom.
TEIJIN LTD
European Patent Application 0225049 A2 (1987)

217 Method and apparatus for processing protein from oilseed by ultrafiltration.
TEXAS A&M Univ. SYSTEM
Europe 0115521 (1987)

218 Method and container for cooking foods, specifically meat.
BOISMAIN P
France 2586903 (1987)

219 Dispenser, in particular for milk or the like.

HEIJENGA B

PCT International 87/00819 (1987)

220 Fibre optical equipment for measuring colour of foods, particularly fresh meat.

EKRO BV VEE-EN VLEESHANDEL

Netherlands 8502138 (1987)

221 An apparatus for sterilizing, pasteurising or blanching a foodstuff in a container.

SCOEITE DES PRODUITS NESTLE

India 160416 (July 1987)

According to the patent the container is hermetically sealed and it comprises of an extension piece adapted to temporarily extend the container. Means for introducing foodstuff so that it fills the container and atleast part of the extension piece is designed. A closing member adapted to temporarily fit the extended container to form a closed assembly is provided with an outlet for the escape of air. An apparatus is designed for purging steam through the contents until they have shrunk to such an extent that the foodstuff in the extension piece has subsided into the container. A means for separating the container, extension piece and closing member from each other.

222 Improvements to apparatus for high temperature heat treatment (UHT) of liquid foods, such as milk, in order to extend shelf life.

LAITERIE DE SAINT DENIS DE L' HOTEL

Europe 0210887 A1 (1987)

PRESERVATION AND PACKAGING

223 Steam injection process.

SOCIETE DES PRODUITS NESTLE SA

Europe 0223887 A1 (1987)

224 Increased shelf-life for refrigerated fish.

STAUFFER CHEMICAL CO

United States 4670277 (1987)

225 Method of producing a dehydrated food product.

HOUSE FOOD INDUSTRIAL CO LTD

United States 4664924 (1987)

226 Frozen novelty suitable for deep frying.
INTERNATIONAL FRIED ICE CREAM
Europe 0217409 (1987)

227 Packaging for ready meals.
PSVERPACKUNG GMBH
German Federal Republic 8625504 (1987)

228 Unit package.
KRAFT EUROPE R&D INC.
Europe 0224908 A2 (1981)

229 Food package.
GUILLIN EMBALLAGES
Europe 0219442 A1 (1987)

230 Process and device to sterilize packaging material.
PKL VERPACKUNGSSYSTEME GMBH
German Federal Republic 3515738 (1986)

231 Microwave food package.
MINNESOTA MINING AND MANUFACTURING CO
Europe 0218419 (1987)

232 Aseptic packaging.
DONALD RA
Europe 0217667 (1987)

233 Improved tray for packaging.
GARWOOD LTD
PCT International S7/01330 (1987)

234 Packaging tray
SOCIETE FDR SARL
Europe 0225232 A1 (1987)

235 Packaging tray having flexible zones in a supporting layer (Kiwi fruit).
MOFFITT MS
United States 4682693 (1987)

236 Disposable holder for food articles (tacos).

WALL MACHINE WORKS

United States 4671404 (1987)

237 Method of obtaining acceptable configuration of a plastic container after thermal food sterilization process.

AMERICAN CAN CO

United States 4667454 (1987)

238 Sealed container.

SHIKOKU KAKOOKI CO LTD

Europe 0226248 A2 (1987)

239 Materials having a deoxidation function and a method of removing oxygen in sealed containers.

NIPPON STEEL CORP.

Europe 0221549 A2 (1987)

240 Screw-top jar with an internal peripheral ledge to support a spoon.

SCHLENTHER (U)

German Federal Republic 8700437 (1987)

241 Process and apparatus for making sealed packs inert.

L'AIR LIQUIDE

France 2581027 (1986)

242 Container and cap assembly.

GENERAL FOODS CORP.

United States 4669630 (1987)

243 Polyamide food casing ready for use, its production and use to package foods.

NAUTRIN-WERK BECKER & CO

German Federal Republic 3625364 A1 (1987)

244 Food Packaging

GUILLIN F

France 2587683 (1987)

245 Packaging container.
THERMOPAC CO LTD
Europe 0085559 B1 (1987)

246 Package containing quality-retaining agents.
MITSUBISHI GAS CHEMICAL CO.
United States 4657133 (1987)

247 Container especially for foods.
GIZEH-WERK GMBH
Europa 0226882 A2 (1987)

248 Recloseable opening arrangement on a packing container.
TETRA PAK INTERNATIONAL AB
Europa 0216239 A2 (1987)

249 Process and equipment to apply drinking straws to packaging containers.
OVERBECK GMBH & CO
German Federal Republic 3532839 (1987)

250 Food container and its manufacture.
RATH FJ
German Federal Republic 3538524 A1 (1987)

251 Easy-to-open sterilizable packages.
WOLFF WALSRODE G
German Federal Republic 3545768 A1 (1987)

252 Pouch type package andits applications
SIG SCHWEIZERICHE INDUSTRIE GESELLSCHAFT
Switzerland659989 (1987)

253 Dual compartment sandwich package.
MCDONALD'S CORP.
United States 4653685 (1987)

254 Base of a round torte box.
BAUER G
German Federal Republic 8625430 (1987)

255 A new strong and impermeable multiple-layer film.

WIHURI OY
Europe 0225164 A2 (1987)

256 Biaxially oriented coextruded multilayer film.

HOECHST AG

German Federal Republic 3538101 A1 (1987)

257 Transparent shrinkable film having one or several layers.

FELDMUHLE AG

Europe 0065278 (1987)

258 Sealable multilayer films.

WOLFF WALSRODE AG

Europe 0224862 A2 (1987)

259 Smokable synthetic food packaging film.

KUREHA KAGAKU KOGYO KK

Europe 0217069 (1987)

260 Flexible film laminates and retortable food pouches fabricated therefrom.

MOBIL OIL CORP.

Europe 0082188 B1 (1987)

261 Opening device for shrinkable film packages.

E I DU PONT DE NEMOURS & CO

Europe 0223498 A2 (1987)

262 Flexible sachet with a removable rigid piece which can close the sachet.

SOCIETE GENERALE DES EAUX MINERALES DE VITTEL

Europe 0147346 B1 (1987)

263 Bag made of flexible synthetic material having stiffening and shaping means along its front edges.

SOCIETE GENERALE DES EAUX MINERALES DE VITTEL

France 2581366 (1986)

264 Bag type packing container.

BRAMLAGE GMBH

German Federal Republic 3545768 A1 (1987)

265 Pour spout carton.
WESTVACO CORP
United States 4657143 (1987)

266 Sealed gable top carton having a mouthpiece of one piece molding.
DAI NIPPON INSATSU KK
United States 4669640 (1987)

267 Moisture barrier carton with reclosable cover.
INTERNATIONAL PAPER CO.
United States 4673126 (1987)

268 Easy-to-open carton for confectionery or other food products including a skive underlying a tearstrip end.
MEIJI SEIKA KK
United States 4657142 (1987)

269 Icecream carton.
CONTAINER CORP OF AMERICA
United States 4667872 (1987)

270 Process and device to fill icecream and similar products in boxes or box-type packages.
ALLPACKMA A MIEBACH GMBH
German Federal Republic 3531569 (1987)

271 Conical package.
UNILEVER NV
Europe 0226834 A2 (1987)

272 Method of forming a reclosable package.
OSCAR MAYER FOODS
Europe 0222558 A2 (1987)

273 Packaging arrangement for preparing and serving food products.
SIGNODE CORPORATION
United States 4660716 (1987)

274 Packaging container for microwave popcorn popping.
JAMES RIVER NORWALK
United States 4678882 (1987)

275 Stackable self-supporting pack for products such as fruit and vegetables.

NESPACK SPA

France 2581973 (1986)

276 Packaging of fresh fruit and vegetables.

BUNZL FLEXPACK LTD

Europe 0223576 A2 (1987)

277 Process for packing traditional bakery bread and the packaging containing it.

RHONE POULENC FILMS

France 2581618 (1986)

278 Film to package bread and the like.

RIETMANN GMBH

German Federal Republic 8701518 (1987)

279 Packaging material for toasting bread to be sterilized.

KARL DICKEL & CO KG

German Federal Republic 8700535 (1987)

280 Biscuits and like products packaging machine (to package rows of biscuits in flexible tray containers).

RE MA DOL SNC

Europe 0225958 A1 (1987)

281 Packaging of natural cheese.

ALFA-LAVAL CHEESE SYSTMS LTD

PCT International 87/01906 (1987)

282 Cheese-box open on one side.

KARWENDEL-WERKE FRANZ X HUBER

German Federal Republic 8702304 (1987)

283 Composite plastics pack for portions of processed cheese.

ENTREMONT SA

France 2563814 (1985)

284 Microwave interactive package containing stainless steel and method of making the same.
BEATRICE/HUNT-WESSON INC
PCT International 87/02334 (1987)

285 Bottom structure of a paper box for liquids.
SANYO KOKUSAKU PULP CO LTD
Europe 0119303 B1 (1987)

286 Preventing oxidation of liquid in containers.
ROBERTS BG
United Kingdom 2182647 (1987)

287 Liquid container.
SPLICERITE LTD
PCT International 87/01099 (1987)

288 Carbonated beverage container.
ARTHUR GUINNESS SON & CO
United Kingdom 2183592 A (1987)

289 Round juice bottle formed from a flexible material.
OWENS-ILLINOIS INC
Europe 0224982 A2 (1987)

290 Beverage bottle.
LANGHAMMER H
German Federal Republic 8632791 (1987)

291 Gable top package for liquid foods, e.g. milk, and the manufacturing equipment.
TETRA PAK INTERNATIONAL AB
Sweden 449082 (1987)

292 Plug for bag-in-box containers (beers).
MOAKES DP
United Kingdom 2183617 A (1987)

293 Liquid extraction outlets for beverage containers.
GRUNDY LTD
United Kingdom 87/03573 (1987)

294 Self-cooling beverage container.
LIQUID CO_2 ENGINEERING INC.
United States 4669273 (1987)

295 Molded meat vacuum packaging.
GRACE WR AND CO.
United States 4672793 (1987)

296 Process and container for packing and handling fishery products.
ROCHETTE CENPA ONDULE
Europe 0093059 B1 (1987)

297 Container for eggs.
SCIENTIFIC APPLIED RESEARCH PLC
PCT International 87/02336 (1987)

298 Vacuum packaging process.
FGL PROJECTS LTD
Europe 0225064 A1 (1987)

CHEMISTRY AND ANALYTSIS

299 Dry enzyme formulations containing D-amino acid oxidase.
MINNESOTA MINING AND MANUFACTURING CO
Europe 0181102 A1 (1986)

300 A process for producing a novel glucoamylase enzyme.
CPC INTERNATIONAL INC
India 160378 18th June 1984

The patent provides a process for producing a glucoamylase enzyme having a molecular weight of about 75,000 ± 3,000 as determined by SDS-polyacrylamide gel electrophoresis, having a half-life of greater than 3 hours at pH 6 and 70 C. Cells of a strain of Clostridium thermoamylolyticum is cultured under anaerobic conditions in a medium which contains a carbohydrate source, a yeast extract and vitamins and minerals. The glycoamylase enzyme is isolated from the fermentation broth after removing the cells and precipitating extraneous matter.

301 1-mono-glyceride ester of gamma-linolenic acid.

JOWETT (P)

United Kingdom 2183635 A (1987)

302 An improved process for the preparation of 2-chloro acetaldehyde dialkyl acetal.

VAM ORGANIC CHEMICALS LTD

India 160278 (December 1984)

The patent describes the preparation of 2-chloroacetaldehyde dialkyl acetal using a cheap and abundantly available acetaldehyde as the starting material without isolating or separating the toxic 2-chloroacetaldehyde from the reactor product and in the absence of any additional conventional acid catalyst.

FOOD ADDITIVES

303 Production of foamed fruit, vegetable or spice/herbs flavoured products.

INTERNATIONAL FLAVORS AND FRAGRANCES IFF DEUTSCHLAND GMBH

German Federal Republic 3638662 A1 (1987)

304 Cold water soluble gelatin and process.

NABISCO BRANDS INC

Europe 0087317 B1 (1987)

305 A bread or other cereal-based food improver composition.

KYOWA HAKKO KAGYO CO LTD

Europe 0109244 (1987)

306 Process for preparing peanut flavour concentrate.

NABISCO BRANDS INC

United States 4661363 (1987)

307 Process for stabilising flavours in crystallised fruit used in food preparations and the products obtained.

SOCIETE FAUQUE & CO SARL

France 2563415 (1985)

308 Fermented-whey butter flavouring.

LEVER BROTHERS CO

United States 4670267 (1987)

309 Method for imparting smoke colour and flavour to food.
VISKASE CORP
United States 4657765 (1987)

310 Process and means to produce aspartame.
HOECHST AG
German Federal Republic 3532027 (1987)

311 Preparation of a food coating.
FRISCO-FINDUS AG
Europe 0223865 (1987)

312 Coating mix containing a fried component and process therefor.
GENERAL FOODS CORP
Europe 0110587 B1 (1987)

313 Process for preparing heat stable fermented malt flavourant.
GENERAL FOODS CORP
United States 4663168 (1987)

314 Anti-sticking compositions.
PROCTER & GAMBLE CO
United States 4654221 (1987)

CEREALS AND MILLETS

315 Processing aqueous treated cereals.
CANADIAN PATENTS AND DEVELOPMENT LTD
Europe 0088498 (1987)

316 Extruded quick-cooking rice-like product.
GENERAL FOODS CORP
Europe 0226375 (1987)

317 A process for preparing white translucent crystal rice.
PADDY PROCESSING RESEARCH CENTRE
India 160311 (July 1987)

The patent describes a process of selecting paddy grains not affected by pests and diseases and soaking it water at ambient temperature

so that the kernel moisture is not less than 25%. The soaked paddy is parboiled at temperature 70 C to 100 C. The parboiled paddy is partly dried immediately after parboiling to a moisture content of 18%. The paddy is tempered for 4 to 8 hours and further dried at 60 C - 80 C. until the kernel moisture content is reduced to substantially 14%. The dried paddy is cleaned thereafter and shelled/milled before polishing the same in stages to substantially 5% to 7%. of bran removal. The adherent bran is removed from the polished paddy and it is glazed to give a glossy finish.

318 Method for preparing cooked wheat product.
NEW GENERATION FOODS INC
Europe 0103015 B1 (1987)

319 Method of preparing instant, flaked, wheat farina.
NABISCO BRANDS INC
United States 4664931 (1987)

320 Flavour impregnated popcorn.
DNA PLANT TECHNOLOGY CORP
Europe 0217368 (1987)

321 Method of producing a sugar syrup from sorghum.
BIOCON LTD
United Kingdom 2182936 (1987)

PULSES, OILSEEDS AND NUTS

322 Dehydrated legume product and process for producing same.
BASIC AMERICAN FOODS
United States 4676990 (1987)

323 Process for producing new variety of odourless soybeans.
TAISHI FOODS CO LTD
United States 4677247 (1987)

324 Method of producing calcium-enriched aseptic soybean curd.
MEIJI MILK PRODUCTS CO LTD
United States 4673583 (1987)

325 Method for treating aqueous extracts of soybean.
SOCIETE SOY
France 2584272 (1987)

326 Process for preparing tofu charged into a container.
HOUSE FOOD INDUSTRIAL CO LTD
United States 4678677 (1987)

327 Edible soybean koji having number off flavour and process for producing the same.
BELL SHOKUHIN KK
Europe 0218967 A1 (1987)

328 Method of producing lactic acid fermented soy milk.
TAISHI FOODS CO LTD
United States 4664919 (1987)

329 Process for manufacture of soybean curd.
MORIYA I
United States 4664930 (1987)

330 Flavoured. soluble protein concentrates from peanuts and process for making.
MORSE CAPITAL CORP
United States 4667015 (1987)

TUBERS, VEGETABLES AND FRUITS

331 Prolonging the shelf-life of fresh root vegetables.
DNA PLANT TECHNOLOGY CORP
United States 4670275 (1987)

332 Washing process and machine for low-density vegetables.
BRIAND J
France 2581533 (1986)

333 Process for preparing French fried potato strips.
LAMB-WESTON INC
United States 4632838 (1986)

334 Process for producing a stable, non-frozen, structured potato product.
PADULA MA
United States 4663180 (1987)

335 Method for consistency control of manufactured to mato pulp.
CAMPBELL SOUP CO
United States 4670281 (1987)

336 A process for the instant separation of muskmelon seeds from its internal mucilagenous ball.
GURDEEP SINGH JOHAR
India 160283 (March 1984)

The patent describes a process of separation of muskmelon seeds by treating the mucilagenous part of the fruit with 1:1 dilute mineral acid, lixivating for a minute or two, adding excess of water and finally filtering through a big-pole sieve with continuous hand-rubbing. The entire mucilagenous material flows down the sieve, partly dissolved in the acid, leaving the seeds behind. The seeds thus obtained are fresh, neat and clean.

337 Method for processing black ripe olives.
EARLY CALIFORNIA FOODS INC
United States 4664926 (1987)

338 Processing of fruit raw material.
UNION OF SOVIET SOCIALIST REPUBLIC
USSR 1220614 A (1986)

339 Control of atmosphere in fruit stores.
NATIONAL RESEARCH DEVELOPMENT CORP.
United Kingdom 2181364 (1987)

340 Fruit products containing flaked grains.
GENERAL MILLS INC
United States 4681770 (1987)

341 Stable banana product.
HOLTON FOOD PRODUCTS CO
United States 4675195 (1987)

342 Debittering bran flakes using citrus peel.

GENERAL FOODS CORP

United States 4661362 (1987)

SUGAR, STARCH AND CONFECTIONERY

343 Process and apparatus for the continuous production of sugar crystals from sugar juices.

BABCOCK F

India 160417 (July 1987)

The patent describes the continuous production of sugar crystals from sugar juices by vacuum evaporation according to a process which comprises introducing concentrated syrup and small crystals into a series of cells that communicate with one another and passing the mixture successively through all the cells. Sugar juice is added to it and it is heated so as to bring about the evaporation of part of the juice. The feed rates of the juice to the cells are regulated automatically so as to maintain the syrup in a stable state of oversaturation so that the crystallisation of the sugar causes the crystals introduced into the first cell to grow, without the formation of new crystals.

344 Stabilization of glucose isomerase.

DOW CHEMICAL CO

United States 4675292 (1987)

345 Continuous crystallization of fructose anhydride.

KATO KAGAKU CO LTD

United States 4666527 (1987)

346 Microbial production of polyfructose.

IGI BIOTECHNOLOGY INC

PCT International 86/04091 (1986)

347 Preparation of maltose and maltitol syrups.

LONZA INC

United States 4675293 (1987)

348 Evaluating the purity of honey.

CHEPURNOI IP

USSR 1281233 (1987)

349 Directly pressable maltitol powder and its manufacture.
ROQUETTE FRERES
Europe 0220103 A1 (1987)

350 Pulse combustion process for the preparation of pregelatinized starches.
NATIONAL STARCH & CHEMICAL CORP
United States 4667654 (1987)

351 Carbohydrate refining process and enzyme compositions suitable for use therein.
CPC INTERNATIONAL INC
Europe 0219269 A2 (1987)

352 Method for the preparation of branched cyclodextrins.
NATIONAL FOOD RESEARCH INSTITUTE
United States 4668626 (1987)

353 Method of forming an image with photographic likeness on chocolate.
CHOCOLATE PIX INC
United States 4668521 (1987)

354 Coatings for chewing gums containing gum arabic and a soluble calcium salt.
WARNER-LAMBERT CO
United States 4681766 (1987)

355 Flavoured tableted chewing gum.
WARNER-LAMBERT CO
Europe 0221850 (1987)

356 Production of jam using sulphited fruits.
KONTSELIDZE ZI
USSR 1223881 (1986)

BAKERY PRODUCTS

357 Edible water-in-oil emulsions with a reduced fat content and use of said emulsions for producing bakery products.
UNILEVER NV
Europe 0218277 (1987)

358 Reduced calorie baked goods and methods for producing same.
NABISCO BRANDS INC
United States 4668519 (1987)

359 Hard dough biscuits with a filling and production process thereof.
MORINAGA & CO
Europe 113174 (1987)

360 Fermentation of small dough pieces.
HERRMANN K
German Federal Republic 3340723 (1987)

361 Dual-textured cookie products containing narrow melting range shortenings.
PROCTER & GAMBLE CO
United States 4664921 (1987)

362 Process for producing sandwich-like foods based on surimi.
YAMANAKA SYOKUHIN KOGYO CO LTD
United States 4670276 (1987)

363 Sugar-free pudding composition and dry mix for preparation thereof.
NABISCO BRANDS INC
United States 4663177 (1987)

MILK AND DAIRY PRODUCTS

364 A process for the specific separation of lactose from milk.
VALIO MEIJERIEN KESKUSOSUUSLIIKE
Europe 0226035 (1987)

365 Method for obtaining a product by heat treating a mixture of milk and sugar.
CENTRE D'AIDE PAR LE TRAVAIL
France 2587174 (1987)

366 Drying of milk.
SOCIETE DES PRODUITS NESTLE SA
Europe 0223872 (1987)

367 Substitute milk fat.
UNILEVER PLC
United Kingdom 2178752 (1987)

368 Hard butte composition.
FUJI OIL CO LTD
Europe 0227364 (1987)

369 Method for adjustment of pH during buttermaking.
DEDEK (M)
Czechoslovakia 233535 B1 (1985)

370 Cheese flavoured substance and method of producing same.
BORDEN INC
United Stat.. 4675193 (1987)

371 Method for manufacture of pressed cheese from whey.
ESMIL HUBERT BV
Netherlands 8502250 (1987)

372 Production of renneted cheese with low temperature secondary heating.
UNION OF SOVIET SOCIALIST REPUBLICS
USSR 1222236 A (1986)

373 Grated cheese product and its manufacture.
ENTREMONT SA
France 2551954 A1 (1985)

374 Production of fermented whey containing calcium propionate.
STAUFFER CHEMICAL CO
United States 4676987 (1987)

375 Selective separation of α-lactalbumin from whey proteins.
LAITERIES E BRIDEL
Europe 0209414 A1 (1987)

376 A process for the preparation of a beverage.
NATIONAL DAIRY RESEARCH INSTITUTE
India 160280 (1985)

The patent relates to a process for the preparation of beverage from whey, which has nutritional and therapeautic value; has palatable properties and long shelf life and is cheap. Whey is subjected to heat treatment for destroying the undesirable microorganisms and subsequently, cooled to allow a growth of the inoculum and then fermented. The presence of the inoculum inhibits the growth of coliform. Then the beverage is filtered to remove the precipitates and a sweetener and a flavouring agent is then added.

377 Composition of ice cream or confectionery products.
FROMAGERIES BEL
France 2559034 (1985)

378 Method and apparatus for entraining gas in ice cream mix.
TWISTEE TREAT CORP
United States 4659575 (1987)

379 Process and equipment to make ice cream balls.
SCHOLLER LEBENSMITTEL GMBH & CO KG
German Federal Republic 3530682 (1987)

380 Icecream containing chocolate and method for producing the same.
MORINAGA AND CO
Europe 0221757 A2 (1987)

381 A sweet featuring ice cream on an oven baked pastry base.
ITALGEL SPA
Europe 0219462 A2 (1987)

382 Fermented oilseed product for preparing imitation dairy products.
KRAFT INC
United States 4678673 (1987)

MEAT, FISH AND POULTRY

383 Process for elaborating and preserving a meat product.
DISAMO SA
Europe 0218769 A2 (1987)

384 Method of preparing meat for human consumption.
TOWNSEND ENGINEERING UK LTD
Europe 0085235 B1 (1987)

385 Vacuum deodorization of meat.
AUSTRALIAN MEAT AND LIVESTOCK CORP
PCT International 87/03454 (1987)

386 Process for producing an improved Vienna sausage meat analog product.
GENERAL FOODS CORPORATION
India 160281 (1985)

As according to the patent an improved Vienna sausage analog is obtained using an intimately blended two-phase system wherein particles of a fat release emulsion phase are dispersed in a continuous matrix phase and the dispersion is stuffed into an edible or nonedible casing and heat set phase. The resulting sausage analog has the textural properties of tenderness, cohesiveness, chewiness, juiciness, snap and flavour approaching all natural meat sausage or frankfurter products.

387 Cooked ham with a modified cross section.
FERRARINI SPA
France 2581842 (1986)

388 Method of producing veal and animal feed therefor.
OHIO GRAIN CO
United States 4673576 (1987)

389 Process for preparing prawn-like food.
TAIYO FISHERY CO LTD
United States 4666720 (1987)

390 Dyed eggs.
PLOUGH INC
United States 4664925 (1987)

FRUIT JUICES AND SOFT BEVERAGES

391 Process for producing fruit juice beverages.
KIRIN BEER KK
Europe 0118034 (1987)

392 Process of removing acids from juice.

DOW CHEMICAL CO

United States 4666712 (1987)

393 Refreshing drink using alfalfa as a starting material.

NISHIYAMA E

Europe 0220353 (1987)

394 A method of preparing non-alcoholic beverages like syrup from cashew apple juice.

ANTONY AUGUST

India 160420 (July 1987)

In this patent, the process comprises method of extracting juice from cashew apple, straining the juice, clarifying the strained juice by mixing it with a clarifying agent, adding sugar, preservative and citric acid to the admixture and stirring the admixture. It is then allowed to keep overnight and thereafter the clear syrup is isolated in a conventional manner.

395 High energy hypotonic sports drink.

SPORTS DRINK INC

Europe 0223540 (1987)

396 Beverages and beverage concentrates nutritionally supplemented with calcium.

PROCTER & GAMBLE CO

Europe 0227174 (1987)

397 Accelerated decaffeination process.

PROCTER & GAMBLE CO

Europe 0114426 (1987)

398 Infusion bags especially to make coffee drinks.

JOH JACOBS & CO GMBH

German Federal Republic 3544263 (1987)

399 Process and device to improve roast coffee.

JOH JACOBS & CO GMBH

German Federal Republic 3544265 (1987)

400 Process for the recovery of volatile constituents from coffee during extraction.
GENERAL FOODS LTD
Europe 0224338 (1987)

401 Process for the recovery of volatile coffee constituents.
GENERAL FOODS LTD
Europe 0227263 (1987)

402 Coffee production.
GENERAL FOODS LTD
Europe 0227262 (1987)

403 Simultaneous coffee hydrolysis and oil extraction.
GENERAL FOODS CORP
Europe 0216971 (1987)

404 Production, conservationand sweetening of infusion of hot and/or cold coffee and other drinks in general.
CARUSON D
Europe 0217755 (1987)

405 Enzymatic treatment of black tea leaf.
PROCTER & GAMBLE CO
United States 4639375 (1987)

406 Tea extraction process.
THOMAS J LIPTON INC
United States 4668525 (1987)

SPICES AND CONDIMENTS

407 Manufacture of a condiment.
SOCIETE DES PRODUITS NESTLE SA
Europe 0226769 A1 (1987)

408 Foamed mayonnaise and method for the preparation of such products.
BATTELLE MEMORIAL INSTITUTE
Europe 0134 196 B1 (1987)

409 Mustard-based foamed seasoning and its production.
BATTELLE MEMORIAL INSTITUTE
Europe 0123649 (1987)

410 Preparation of sauces.
FLEURY MICHON SA
PCT International 87/02224 (1987)

FATS AND OILS

411 A process for the preparation of solid fat from edible oils without hydrogenation.
VISWANATHA SANKARAN
India 160248 (1984)

Liquids oils can be converted to solid fat by a process called inter-esterification using a catalyst. By this conversion the iodine value is not reduced and the PUFA (polyunsaturated fatty acid) content is retained. This high PUFA (linoleic acid) content prevents the deposition of cholesterol in arteries. The potent describes in the inter-esterification process with sodium propylene glycoxide as a catalyst to an alkali refined and bleached edible liquid.oil.

412 Treatment of cooking oils and fats.
REAGENT CHEMICAL & RESEARCH CO
United States 4681768 (1987)

413 Edible fat and a process for producing such fat.
UNILEVER NV
Europe 0129293 (1987)

414 Water-in-oil emulsions.
UNILEVER PLC
United Kingdom 2182942 (1987)

415 Process for alkali refining triglyceride oils.
THIOKOL CORPORATION USA
India 160358 (July 1987)

The patent describes an improved process for the purification of natural oils such as triglyceride oils. It comprises of an improved alkali refining procedure which improves the colour, colour stability, odour and/or flavour of natural oils About 50 to 2000 ppm of alkali

metal borohydride is employed during the alkali extraction treatment. Oils of superior colour and purity may be obtained by employing the alkali refining treatment of this invention in conjunction with a degumming pretreatment step and a bleaching step. The bleaching treatment if needed could be followed by a deodorization treatment.

DIETETIC AND PROTEIN FOODS

416 A process for producing a food product effective in the treatment of leprosy.

SOCIETE DES PRODUITS NESTLE

India 160419 (1987)

The patent provides a process for producing a food product effective in the treatment of leprosy. It involves dry-mixing of known proteins of lactic or vegetable origin, glucose or a carbohydrate which serves as a source of glucose, -tryptophan and optionally flavouring and sweetening agents. Lipids in the liquid state are added to the resulting mixture to obtain a product containing proteins, L-tryptophan, lipids, carbohydrates and flavouring and sweetening agents. It is rich in proteins to reduce the protein malnutrition which promotes leprosy by reducing cell immunity.

417 Snack food product with high dietary fiber content and process for producing the same.

WARNER-LAMBERT CO

United States 4673578 (1987)

418 Producing fibrous food products.

MINAMINIHON RAKUNO KYODO KK

Europe 0225770 (A2) (1987)

419 Sonic process for converting proteinaceous raw materials in situ into semi-solid food products.

REACTION TECHNOLOGY INC

United States 4675194 (1987)

420 Production of a fish-based proteinaceous food product.

MDINARADZE TD

USSR 1171003 (1985)

421 Protein composition characterized by lower thermogelation temperature and improved acid solubility.

CIBA CORNING DIAGNOSTICS CORP

United States 4675201

422 Process for manufacturing a hydrolised vegetable protein isolate and its use in beverages and other foodstuffs.

RALSTON PURINA CO

Europe 0148600 (1987)

423 Hydrolyzed protein chelates.

VITA TECH INTERNATIONAL INC

PCT International WO 87/02867 A1 (1987)

424 Process for the preparation of protein for hydrolysis.

STAUFFER CHEMICAL CO

Europe 0087246 (1986)

MICROBIOLOGY AND FERMENTATION
(including Alcoholic Beverages)

425 Anticlostridial agents.

UNITED STATES OF AMERICA

United States 4677119 (1987)

426 Process to obtain an improved microbial protein isolate.

HOECHST AG

German Federal Republic 3523366 (1987)

427 A process for preparing a composition for the antimicrobial treatment of foodstuffs particularly deep-freeze destined foodstuffs.

FREIMUT REIMER

India 160407 (July 1987)

The patent describes a process for preparing a composition for anti-microbially treating deep-frozen foodstuffs such as fish, meat, shrimps, fowl and also dry feedsmade from the waste of whale and fish, shrimp meal, animal-body derived meal, meat-feed meal and blood derived meal being admixed with a conventional quaternary onium compound isothiazolinone compound.

428 Improved malolactic fermentation method.

MICROLIFE TECHNICS INC

Europe 041878 B1 (1987)

429 Batch fermentation process.

SIEBEL SON'S CO INC

United States 4659662 (1987)

430 The propagation of yeast,. fermentation employing that yeast and products of that fermentation.

BASS PLC

United Kingdom 2185040 (1987)

431 A process for the production of spherical agar beads.

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

India 160264 (1985)

The patent relates to immobilized yeast cells/microbes in spherical agar beads for various industrial applications in biotechnology such as production of ethyl alcohol from molasses, sucrose or glucose in batch or in continuous system. This method is simple, has no deleterious effect on yeast metabolism, requires no colloidal silica, polyethylene glycol or other non-aqueous organic solvents like toluene, tetrachloroethylene etc. for the formation of agar beads.

432 DNA strand coding for alpha-acetolactate decarboxylase und yeast transformed with the DNA strand.

KIRIN BEER KK

Europe 0228009 A2 (1987)

433 Process for producing L-lysine by fermentation.

KWOWA HAKKO KOGYO CO LTD

United States 4657860 (1987)

434 Flavour control of protein hydrolysates.

IMPERIAL BIOTECHNOLOGY LTD

Europe 0223560 (1987)

435 Production of vinegar with bacteria on a support.

KIKKOMAN CORP

United States 4661356 (1987)

436 A process for the simultaneous saccharification and fermentation of cellulose to ethanol.

INDIAN INSTITUTE OF TECHNOLOGY

India 160444 (July 1987)

The patent describes a process which comprises in reacting delignified cellulose, nutrients and yeast at a pH of 4 to 5 and at a temperature to obtain ethanol. The broth consisting of the reacting medium is subjected to the step of vacuum cycling for removing ethanol formed during the reaction to keep its level in the broth between 0.5% to 2.5% by weight.

437 Production of low-ethanol beverages by membrane extraction.
SEPRACOR INC
PCT International 87/02380 (1987)

438 Beer manufacture.
ROHM GMBH
German Federal Republic 3530009 (1987)

439 Preparation of low calorie beer.
MILLER BREWING CO
United States 4666718 (1987)

440 System and apparatus for beer fermentation in soft containers.
ALFA-LAVAL FOOD ENGINEERING AB
PCT International 87/00548 (1987)

441 Process to extract hop constituents.
HOPFEN-EXTRAKTION BARTH & CO
German Federal Republic 3346776 (1987)

442 Method for partial or total dealcoholization of wine and/or cider and device for implementing such method.
FEDERATION DES COOPERATIVES MIGROS
France 87/03902 (1987)

443 Soybean milk-containing alcoholic beverages.
TAKARA SHUZO CO LTD
United States 4656044 (1987)

INFESTATION CONTROL AND PESTICIDES

444 Method of preparing an emulsified pesticidal composition.
DOW CHEMICAL CO
India 160348 (July 1987)

The patent describes a method of preparing an emulsified pesticidal composition which comprises of a miscible combination of a polar solvent and a non-polar solvent; a pesticide compound which is soluble in the combination of polar and non-polar solvents; an emulsifier to cause or permit on emulsification of the concentrate with water; a polymeric material which is soluble to the polar solvent and adapted to

remain within the dispersed phase on emulsification of the concentrate and to form a solid or semi-solid matrix to prevent coalescence of the emulsion particles with water.

WASTE UTILISATION

Nil

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ENGINEERING AND EQUIPMENT

445 Method for preparation of shaped food products and equipment and spray drum for this process.

GEBRUDER BUHLER AG

Europe 0231817 A2 (1987)

446 A nut cracker.

AGROMACHINES LTD

India 160934 (Aug 1987)

The patent describes a palm nut cracker which provides a uniform and proper cracking action of the nut. The nut cracker has a housing with an inlet, a rotatable impeller shaft and an impeller held thereto characterized in the shaft along the vertical axis of the housing. The impeller rotates along a horizontal plane. The housing also has an outlet and an inclined base plate inclined downwardly in the direction of the outlet.

447 Screen and rotor assembly for grain husking decorticating, polishing and whitening machines.

FELIPE SALETE GARCES

India 160846 (Aug 1987)

The patent describes an invention which does complete husking of the grain and also simultaneously gently rubs the grain in order to give a polish to it. It has a screen and rotor assembly for grain husking, decorticating, polishing and whitening machines.

448 An indoor solar cooking device.

RAMNARAYANA CHAKRABORTHY

India 160867 (Aug 1987)

The patent describes the invention wherein the solar energy and water in the form of steam have been utilised for the purpose of fuel in ovens for cooking in particular and heating in general. The invention has the special advantage of keeping the cooker and the cook indoor, while placing the heat collector in the open sun. The heat collector is made of a continuous zig-zag or U shaped tube made of copper, aluminium or iron through which water is made to pass from a water reservoir or tank and the water in the form of steam is lead to the cooker which is a double walled chamber (with heat insulating

material between the walls) closed at the top and the bottom and having pipes for inlet and outlet of the steam. The steam from the outlet of the steam. The steam from the outlet goes back to the source which is the water reservoir or tank.

449 Colour analyser.

ANALYTICAL INSTRUMENTS LTD

Great Britain 2187281

450 Method and device for intermittent cleaning of evaporators.

METZGER K

Germany 3609180 (1987)

451 Method of making a two section bakery container.

ROSMAN M

United States 4683703 (1987)

452 An appliance for baking articles of food.

COMMANDER APPLIANCES

India 160511 (July 1987)

The patent refers to a baking appliance for food comprising a body having a base plate with a central opening. A cover member is removably spported on the body. The opposed faces of the upper end of the body and the peripheral end of the cover member have cooperating notches for allowing discharge of hot air. A cap shaped member is removably supported within the body on the base plate. A plurality of openings spaced from each other are provided on the wall of the cap shaped member for discharge of hot air. A plate extending outwardly from the lower end of the cap shaped member removably supported over said opening in the base plate, forms a drip tray for receiving particles of food falling from the articles which are baked.

453 Disposable ice and beverage container.

BEELER MANUFACTURING CO

United States 4687130 (1987)

454 Apparatus for dispensing cold products.

ABBOTT RL

Indian 160486 (Aug 1984)

The patent describes an apparatus for producing and dispensing frozen products such as confections and drinks, which can be sprayed. The apparatus is provided with a cleansing system wherein, when it is desired to change the product to be sprayed, all traces of the last product can be removed. Further the pressure of the substance to be dispersed is raised to a predetermined and constant level and then sprayed onto a cold wall at that pressure. The formed substance is scraped off the wall at a constant rate so that the temperature of the product is constant throughout.

455 Liquid carbonating apparatus.

SODASTREAM LTD

India 160891 (Sep 1983)

The patent refers to the invention of an apparatus for aerating liquids, especially a portable apparatus for carbonating water to prepare carbonated drinks. The carbonating apparatus includes bottle mounting means fixed in position adjacent the sealing means for engaging and sealing the neck of the bottle. To avoid the danger of bottle burstingin the machine, a vent pasasage is provided, which extends through the sealing means for communicating the interior of the bottle with atmosphere A common operating member is provided for adjusting the movable wall of the enclosure and for actuating the gas valve means. The provision of a single operating member simplifies the operation of the apparatus so that it can be easily used even by people who are not familiar with it.

456 A pressurization system for a spray container.

MARIO ANTONIA GARCIA RICO

India 160940 (Aug 1987)

The patent describes an invention which relates to a pressurization system for a spray container having its corresponding spray value. It has an elastic tubular body forming two co-axial chambers in the container. This tubular body is hermetically sealed over the spray head and is installed on a support core which must extend to close to the lower base of the recepient. For practical use, the system requires certain structural accessories like the insertion of an inner sleeve, micrometric drill holes

etc. Along with the pressurization system, the invention also assures simpler process for the mechanisation of the container.

PRESERVATION AND PACKAGING

457 Process and device for continuous puffing and expansion drying of foods.

KOCH C

Germany Federal Republic 3602464 A1 (1987)

458 Plate freezing of moist foods.

GORLITZ A

German Federal Republic 932 102

459 Process and tunnel for surface cooling of foods.

BARTHELMES P

Europe 0228308 A1 (1987)

460 Preventing food oxidation.

SOCIETE DES PRODUITS NESTLE SA

Europe 0226211 A2 (1987)

461 Process for packaging and pasteurization of perishable foods.

AUBERT C

Europe 0230978 (1987)

462 Method of storing perishable goods and device therefor.

MITSUI AND CO LTD

PCT International 87/04053 A1 (1987)

463 Packaging process for food articles, especially cooked dishes, ensuring long shelf-life at ambient temperature

RHONE-POULENC FILMS

France 2587684 A1 (1987)

464 Process and device for detection of the extent of heat treatment of a food.

NEUHANS ELECTRONIC GmbH

German Federal Republic 3540751 A1 (1987)

465 Method for microwave cooking of foods.

DU PONT CANADA INC.

Europe 0231 663 A2 (1987)

466 Method and apparatus for convection heating food.

SWARTLEY JS

Europe 0103630 B1 (1987)

467 Process and device for grouping of items to be packaged.

HANE PAAL KG MASCHINENBAU GMBH AND CO

German Federal Republic 3546248 A1 (1987)

468 An edible ink and method of printing onto one edible substrate using same.

BIGIN MARKETING LTD

Great Britain 2186782 A (1987)

469 Method and device for manufacture of foods with an edible covering.

BAHLSENS KEKSFABRIK KG

German Federal Republic 3609522 A1 (1987)

470 Apparatus and method for filling a container, especially aseptic filling.

SCHOLLE CORP

Europe 0085564 B1 (1987)

471 A feed device for a wrapping machine for wrapping collated or stacked products.

KHOSLA ENGINEERS

India 160681 (July 1987)

The patent describes an improved construction of a feed device for use with a wrapping machine for wrapping

of biscuits, which obviates the disadvantages associated with the prior ones in the art. It comprises a conveyor having a plurality of lanes. It provides a correct dispensing of the collated products even in the event of a fault in the thickness of the collated product. The feeding of the collated product is easier and it can be easily expanded to pack a greater number of collated products.

472 Single layer elastic tubular polyamide film for packaging of pasty materials, especially foods, packaged hot or subjected to heat treatment after packaging and process for its manufacture.

NATURIN-WERKE BECKER AND CO

Europe 0103699 B1 (1986)

473 Edible film barrier resistant to water vapour transfer.

WISCONSIN ALUMINI RESEARCH FOUNDATION

PCT International 87/03453 A1 (1987)

474 Laminated film for packaging.

FUJIMORI KOGYO CO INC

United States 4692 327 (1987)

475 Pack with one integral closure, especially for pasty foods.

FROMAGERIES BEL

France 25974636 A1 (1987)

476 Receptacle with an articulated cover consisting of a bottle divided into sections.

DELPECH L

France 2589824 A1 (1987)

477 Multipack with a cover and a separate bottom of the trough type.

DREYFUS, R.

France 2591 563 A1 (1987)

478 Heating tray.

ROLAND JF

France 2586 735 A1 (1987)

479 Plastics bag for vacuum packing.
KRISTEN H
Europe 0216327 A2 (1987)

480 Tubular bag-type pack.
HOECHST AG
German Federal Republic 3708305 (1987)

481 Tubular casing with single-sided seal.
HOECHST AG
German Federal Republic 8708028 (1987)

482 Process for preparing of a pack for items, especially chocolate bars and tube-type pack.
DEUTSCHLANDER G
Europe 0230855 A2 (1987)

483 Storag pack for ball shaped foods, especially ice cream balls.
SCHOELLER LEBENSMITTEL GMBH AND CO LTD
Europe 0216107 A2 (1987)

484 Methods of making metal can ends with plastics closures.
METAL BOX PLC
Europe 0215671 A2 (1987)

485 Transparent plastic can.
AJINOMOTO CO INC
United States 4684553 (1987)

486 Barrel-type transport container.
FISSLER GMBH
German Federal Republic 3602689 A1 (1987)

487 A pack consisting of cardboad, corrugated cardboard or other sheet material with gussets at the corners and insect locking flaps and corresponding blank.
HUGUES NICOLLET SA
France 2589433 A1 (1987)

488 Carton with pour spout.
RALSTON PURINA CO
United States 4684058 (1987)

489 Packaging boxes or cartons.
AUTOBAR VENDABEKA LTD
Europe 0087306 B1 (1987)

49 Blown bag-in-box composite container and method and apparatus for making the same.
PROCTER AND GAMBLE CO
Europe 0225677 A2 (1987)

CHEMISTRY AND ANALYSIS

491 Process for detection of antibiotic and sulphonamide residues in biological fluids or foods.
MULLER F
German Federal Republic 3613794 A1 (1987)

492 A method of heat stabilization.
ALFASTAR AB
Europe 0240474 A2 (1987)

493 Process for preparation of finely dispersed powdered carotenoid preparations.
BASF AG
German Federal Republic 3611229 A1 (1987)

494 A foodstuff containing a lactate salt.
OSCAR MAYER FOODS CORP.
Europe 0230122 A2 (1987)

495 Process for mixing or kneading powdery food materials.
SUZUKI T
PCT International 87/04058 A1 (1987)

496 A process for preparing a 2,3-Dihydro 2,2-dimethyl benzofuran 7-YI N-(N,N-Disubstituted aminosulfenyl)-N-methyl carbamate.

OTSUKA CHEMICAL CO LTD

India 160648 July 1987

The patent describes a process for preparing a 2,3-dihydro-2-2-dimethylbenzofuran-7-yl N-(N,N-disubstituted aminosulfenyl)-N-methyl carbamate represented by the formula (III) wherein R^1 and R^2, which may be the same or different each represents -X-COOR^3, in which X represents an alkalyene group having 1 to 6 carbon atoms and R^3 represents an alkyl group having 1 to 8 carbon atoms or a cycloalkyl group having 3 to 6 carbon atoms. It also comprises reacting 1 to 2 molecules of aminosulfenyl chloride derivative represented by the formula (I) wherein R^1 and R^2 are the same as defined above with 1 mole of 2,3-dihydro-2,2-dimethylbenzofuran-7-yl N-methyl-carbamate represented by the formula II at a temperature of -20 to 50 C for 1 to 20 hours in the presence of a basic compound

497 A process for the conversion of tertiary alkyl halides into ethers

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH,

India 160844 (August 1987)

According to the patent, a solution of the alkyl halide (3 parts) in the appropriate alcohol (15 parts) is refluxed over zinc oxide (1 part) for a period of 1-24 hours. The product is filtered off from the insoluble zinc salts, evaporated to remove the solvents and distilled.

FOOD ADDITIVES

498 Thermally stable particulate artificial sweeteners.

DOW CHEMICAL CO

Europe 0229730 A2 (1987)

499 Low-cariogenic sweeteners.

MITSUI SUGAR CO LTD

United States 4695326 (1987)

500 Sweetener composition and method.

ZIMMERMAN G

United States 4686 107 (1987)

501 Encapsulation matrix composition and encapsulate containing same.

SCM corporation

United States 4689235 (1987)

502 Shelf stable acid food dressings containing fibrous protein complexes.

KRAFT INC

Europe 0227659 A1 (1987)

503 Methylthioionene derivatives and use thereof in augmenting or enhancing the aroma or taste of foodstuffs.

INTERNATIONAL FLAVOURS AND FRAGRANCES INC

United States 4694106 (1987)

504 Process for the efficient separation and recovery of aroma and flavour volatiles.

PROCTER AND GAMBLE CO

Europe 0240067 A2 (1987)

505 Flavour additive for foods and beverages.

HOPSTABIL HOPFENVERARBEITUNGS-GESSELSCHAFT mbH

German Federal Republic 35311130 A1 (1987)

506 Manufacture of colorants from blue grape varieties.

MALIK F

Czechoslovakia 246449 (1986)

507 A process for the extraction of garcinol hydroxycitric acid and anthocyanins which are useful in food industry as colouring additives from the plant kokum (Garcinia indica).

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

India 160753 (Aug 1987)

The patent describes a process of treating the dried and powdered fruit rind of kokum fruit with water to obtain a water extract containing hydroxycitric acid and anthocyanines, separating the same by fractional chromatography and further treating the plant material residue with an organic solvent like alcohol to obtain garcinol The water for extraction used is acidulated with mild acid like hydrochloric acid, sulphur dioxide or potassium metabisulphite. The fractional chromatography separation is carried out on an inert support of the aqueous extract by successive elution with acetone and water. The hydroxycitric acid syrup concentrate obtained is by the treatment with lime as calcium salt or by absorption on starch as free flowing powder.

508 Preservative composition.

FREUND INDUSTRIAL CO LTD

Europe 0229380 A1 (1987)

509 Process for preparing pectin from plant tissues.

SAKAI

United States 4686187 (1987)

510 Pectin food product.

GENERAL FOODS CORP

United States 4686106 (1987)

511 Directly compressible maltitol powder and process for preparing it.

ROQUETTE FRERES

France 2588005 A1 (1987)

512 Gelatin containing β-carotene.

BAYER AG

Europe 0221277 .2 (1987)

513 Process for preparing a coated-particle salt substitute composition.

MALLINCKRODT INC

Europe 0227325 A1 (1987)

CEREALS AND MILLETS

514 Process for controlling the germination of malting barley.

KOBANYAI SORGYAR

Europe 0175742 B1 (1987)

515 Improvement of the structure of maize extrudates.

FLESSNER GMBH AND CO

German Federal Republic 3601830 A1 (1987)

PULSES, OILSEEDS AND NUTS

516 A continuous solvent extraction process for the defatting of whole kernels and oilseeds.

VISHVA MITRA BHUSHAR

India 160765 (Aug 1987)

The patent describes an economic and efficient method for the extraction of kernels and oilseeds for use as human food and oil and other like by-products. In the present method, the kernels are not subjected to any pressure, concussion or crushup. The process of using a minimum of two extraction units and three distillation units as a set provides an automatic and continuous economic process for the production of defatted whole kernels by solvent extraction, whereby the solvent once used is recovered and is reused with a fresh amount of oilseeds or kernels in a cycle. This process is suitable for the extraction of groundnut kernels, soyabean splits, mango kernels, almond kernels, rice bran and tamarind seeds. The defatted whole kernels obtained are enriched in the protein content and are suitable for different organoleptic tastes and hedonic consumption and in case of ailments by the sick.

517 Method for treating aqueous solution of soybean protein with enzymes.

HOUSE EOOD INDUSTRIES CO LTD.

United States 4687739 (1987)

518 Process for manufacture of emulsions containing soyprotein.

GENERAL FOODS CORP

United States 4696826 (1987)

519 Soft soybean oil filler cream.

NABISCO BRANDS INC.

Europe 0237436 A2 (1987)

520 Treated soybean with reduced phosphorus and potassium levels, process for preparing the same and processed soybean foods obtained therewith.

TERUMO CORP

Europe 0234998 A1 (1987)

521 Process for honey-roasting nuts.

NABISCO BRANDS INC

Europe 0226341 (1987)

TUBERS, VEGETABLES AND FRUITS

522 Optoelectronic process for measuring the dimensions and shapes of fruit, vegetables and various articles.

TEXPA ENGINEERING SA

France 2582801 A1 (1986)

523 Case for packaging fruit or vegetables.

SOCIETE CIVILE DE RECHEICHES DES PRODUITS DU SOLEIL REPROSOL.

France 2591006 A1 (1987)

524 Blank for trays for fruit and vegetables and assembly of the tray.

LA NACELLE

France 2595324 A1 (1987)

525 Production of a foodstuff based on vegetable protein.

SOCIETE DES PRODUITS NESTLE SA

Europe 0210448 A1 (1987)

526 Flour, bread, milk and other products from white sweet potatoes, cassava, edible aroids, amaranth, yams and lotus.

SLIMAK KM

PCT International 87/04599 A1 (1987)

527 Preparation of vegetable aroma concentrate or powder.

AROMES DE BRETGNE SA

France 2597724 A1 (1987)

528 Process for manufacture of potato pan cakes.

WIESE F

German Federal Republic 3604266 A1 (1987)

529 Process for preparation of potatoes for preservation and use of such potatoes for preparation of 'Pommes Frites'

UNION TECHNIQUE AQUITAINE SARL

Europe 0099287 B1 (1987)

530 Potato cake

ABBOTT CS

Great Britain 2187629 A (1987)

531 A process for the production of ethanol.

INDIAN COUNCIL OF AGRICULTURAL RESEARCH

India 160842 (Aug 1987)

The patent describes a process for the production of ethanol from cassava starch by treating the cassava starch slurry with an acid such as hydrochloric acid is sulphuric acid having strength 0.05N to 0.2N and saccharifying the starch. The saccharified starch is subjected to fermentation in a known manner and the ethanol is recovered from the fermented broth. The saccharification is carried out by treating the gelatinized starch with an amylolytic enzyme such as amyloglucosidase.

532 Process for coating of fruit paste products of various shapes and the coated products produced.

DUMAS PH

France 2594005 A1 (1987)

533 Process for preparation of fruit purees and the purees produced.

ETABLISSEMENTS GARNIER

France 2596619 A1 (1987)

534 Bulk handling of raisins.

GENERAL FOODS CORP

United States 4696824 (1987)

535 Orange flavour and aroma compositions made by dense gas extraction of orange flavour and aroma compounds.

PROCTER AND GAMBLE CO

United States 4693905 (1987)

536 Drying aid for dried fruit.

HOECHST (AG)

German Federal Republic 3532342 A1 (1987)

SUGAR, STARCH AND CONFECTIONERY

537 Powdered honey retaining the natural flavour compounds and process for its manufacture.

CHINOIN GYOGYSZER ES VEGYESZETI TERMEKEK GYARA RT

Europe 0110170 B1 (1987)

538 Process for addition and stabilization of vitamin C in a hard candy-like comestible.

STETSON CG

United States 4692339 (1987)

539 A process for obtaining a no-calorie, non-cariogenic chewing gum composition.

GUM BASE CO SPA

India 160941 (Aug 1987)

The patent describes a process for obtaining a no-calorie, non-carcinogenic chewing gum which does not adhere to the teeth particularly to dental prostheses The preferred clastomers for the composition of a base gum of the invention comprise a suitable mixture of poly-isobutylene and an isobutylene-isoprene copolymer. The resins used in the base gum composition are chosen from the group comprising glycerol esters of colophony rosin The natural gum used in the base gum composition of the invention is the so-called chicle gum. The chewing gum composition includes upto 1.5% of a sweetener of the aspartame type.

540 A method of preparing a chewing gum composition.

WARNER-LAMBERT CO

India 160587 (July 1987)

The patent describes the preparation of a gum composition that contains a sequentially releasable plural flavour system with a gum base having distributed an encapsulated flavour component with a water-insoluble coating disposed thereover and an independently disposed primary liquid flavour. The liquid flavour component is prepared from a flavour other than that of the encapsula ted flavour component and both flavour components are separately added to the gum base. Gum compositions prepared thus will offer improved flavour intensity and clarity of flavour transition.

541 A method of preparing a chewing gum composition.

WARNER-LAMBERT COMPANY

India 160588 (July 1987)

The patent describes the invention of a novel chewing gum composition having more juiciness and flavour impact and an enhanced flavour sweetness release. A sugar containing chewing gum prepared by the process has a chewing gum base having incorporated a sweetener and a spherical particle having microporous channels and a flavouring agent, the flavouring agent being sorbed in the microporous channels of the spherical particles. The spherical particles used in the present invention have relatively low bulk densities and contain microporous channels that maximize the sorption capabilities of the particles. These channels increase the particles sorptive surface area and permit the particles to adsorb as well as absorb, non aqueous liquids such as the flavouring liquid.

542 A method for preparation of a flavoured chewing gum composition.

WARNER-LAMBERT CO

India 160521 (July 1987)

The patent describes a method for the preparation of a flavoured chewing gum composition which comprises admixing a chewing gum baseat a temperature from between 70 C to 120 C with a stabilized peppermint oil having a reduced menthofuran content, continuing the mixing until a uniform mixture of chewing gum base and peppermint oil is obtained and forming the mixture into suitable chewing gum shapes.

543 Novel chewing gum composition and method of making same.
WARNER-LAMBERT CO
Europe 0230858 A2 (1987)

544 Chocolate product containing dipeptide-cocoa butter composition.
GENERAL FOODS CORP.
United States 4701337 (1987)

545 Soft-textured confectionery composition containing fiber.
WARNER-LAMBERT CO
United States 4698232 (1987)

546 Chewing gum and confectionery compositions containing a soy flavour enhancer.
WARNER-LAMBERT CO
Europe 0239540 A2 (1987)

547 Compressible soft confection.
NABISCO BRANDS INC
United States 4659582 (1987)

548 A device for on-line estimation and display of Brix, purity and supersaturation of sugar massecuite boiling in closed vessel under vacuum.
COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
India 160668 (July 1988)

The patent describes a device which is based on the three parameter measurement (AC resistivity, viscosity and the temperature) taking level as the fourth parameter as a reference variable and it on-line computes the values of brix, purity and the degree of supersaturation of the massecuite. All the seven parameters are displayed on a panel along with the status of the boiling such as seeding, initial, middle or final boiling stages. The device consists of three main parts: a) Sensor means, b) Digital modules c) and the power supply unit. The invented device is designed for the industrial environment operating upto 40 C temperature and 90% relative humidity. It is useful for the pan boiling stage for sugar industry to boil uniform size crystals in the optimum boiling period. The same device after recalibration can be used for any other crystallization process.

549 Sugar moulded or pressed into a toy boat shape.

FLEISCHAMMER K

German Federal Republic 3532050 A1 (1987)

550 Process and apparatus for extracting sugar from sugarcane.

MAGUM SA

France 2587363 A1 (1987)

551 Sugar-free sweet of the boiled sweet type.

ROQUETTE FRERES

Europe 0094292 B1 (1987)

552 Opaque film for twist wrapping of sweets.

HOECHST AG

German Federal Republic 3611341 A1 (1987)

553 A process for converting starch into syrups by using enzymes.

NOVO INDUSTRI

India 160657 (April 1982)

The patent describes an invention relating to a novel debranching enzyme capable of hydrolyzing alpha 1,6-glycosidic bonds in amylopectin and pullulan. It describes a process for the conversion of starch into dextrose and/or maltose containing starch hydrolysates. This involves saccharification of starch or starch hydrolysates in the presence of an enzyme system consisting of an effective amount of the novel debranching enzyme and a saccharifying enzyme selected from the group consisting of glucoamylase and beta-amylase. Saccharification is conducted in the pH-range of from 3.5 to 5.5 at a temperature in the range of from 55 C and 65 C.

554 Process for preparation of branched oligosaccharides and polysaccharides especially from starch.

BEGHIN-SAY SA

France 2597 72 A1 (1987)

555 Process for preventing staling of starch containing composition.

MEIJI SEIKA KAISHA LTD

Europe 0237992 A2 (1987)

556 Process for the enzymatic degradation of whole flour of carbohydrates to produce a foodstuff, the foodstuff and its use.

BERGKVIST RR

Europe 0231729 A1 (1987)

557 Process for crystallization of glucose monohydrate.

FRIED KRUPP GMBH

German Federal Republic 3541576 A1 (1987)

558 Process for effecting aldose to ketose conversion.

IMPERIAL CHEMICAL INDUSTRIES

Europe 0109203 B1 (1987)

BAKERY PRODUCTS

559 Antistaling/conditioning agent in producing bakery products.

KNIGHTLY, W.H.

United States 4684526 (1987)

560 Bakery ingredient based on whole germinated cereals and process for its manufacture.

LOMPRE B

France 2594002 A1 (1987)

561 Novel baker's yeast and process for making bread.

ORIENTAL YEAST CO LTD

United States 4693898 (1987)

562 Bread based dumplings having an increased fibre content

PFANNI-WERKE OTTO ECKART KG

German Federal Republic 3515031 A1 (1987)

563 High-moisture bread, a process for its rapid manufacture and flour for use in this process.

VIRON P

Europe 0233126 A1 (1987)

564 Bread slice for spreading, especially for manufacture of prepared sandwiches.
JOSWIG W
German Federal Republic 3611650 A1 (1987)

565 Biscuits and their manufacture.
SOCIETE DES PRODUITS NESTLE SA
Europe 0113056 B1 (1987)

566 Emulsifier formulation for cookies.
PROCTER AND GAMBLE CO
United States 4680184 (1987)

567 Food preparation based on drum-wheat semolina which is pretreated, precooked, buttered, sweetened and dehydrated.
ABED A
France 2587881 A1 (1987)

568 Process for manufacture of a tart and a tart filling, and application of this process.
JANSSEN S
French Patent Application 2595547 A1 (1987)

569 Frozen dough for croissants and production process.
SOCIETE GENERALE DE PATISSERIE ARMORICAINE
France 2589041 (1987)

MILK AND DAIRY PRODUCTS

570 Milk carton blank and milk carton with pour spout.
ADOLPH COORS CO
United States 4690299 (1987)

571 Low fat dairy coffee whitener.
CORNELL RESEARCH FOUNDATION
United States 4689245 (1987)

572 Aqueous butter flavoured composition, preparation and use.
LEVER BROTHERS LTD
United States 4684532 (1987)

573 Butter like concentrate.
UNILEVER NV
Europe 0233378 A1 (1987)

574 Substitute composition for cocoa butter.
KAO CORPORATION
Europe 0237307 A2 (1987)

575 Manufacture of a package, especially for soft cheese and the resultant package.
RAYMOND MORIN SA
Europe 0211786 A1 (1987)

576 Process for making cheese from dried milk by the cold addition of rennet.
ROQUETTE FRERES
France 2591431 A1 (1987)

577 Hard cheese from milk concentrate.
COMMONWEALTH OF AUSTRALIA
Europe 0120879 &B1 (1987)

578 Imitation cheese products containing high amylose starch as total caseinate replacement.
NATIONAL STARCH AND CHEMICAL CORP.
United States 4695475 (1987)

579 Imitation cheese product.
KRAFT INC
United States 4684533 (1987)

580 Process and device for simultaneous filling of a number of cheese moulds with metered quantities of curd.
PIERRE GUERNI SA
France 2595197 A1 (1987)

581 Whey protein food product base.
LAND O LAKES INC
Europe 0129346 B1 (1987)

582 Process and cup-type pack for preparation of yoghurt with an upper layer of a fruit preparation.
MATHES H
German Federal Republic 3602870 A1 (1987)

583 Process for manufacture of yoghurt.
SOCIETE DES PRODUITS NESTLE SA
Europe 0081705 B1 (1987)

584 Process and device for preparation of fruit yoghurt.
ZOTT KG
German Federal Republic 3537753 A1 (1987)

585 Production of fat-containing icecream.
AKADEMIE DER WISSENSCHAFTEN DER DDR
German Democratic Republic 235773 (1986)

586 Dry-sugar-free instant pudding mix.
GENERAL FOODS CORP.
United States 4695474 (1987)

587 Sugar-free pudding composition and dry mix for preparation thereof.
NABISCO BRANDS INC
Europe 0221709 (1987)

588 Method of manufacturing a whipped dessert.
MORINAGA MILK INDUSTRY CO LTD
United States 4668520 (1987)

589 Production of whipping cream.
BRATLAND A
Europe 0095001 B1 (1987)

MEAT, FISH AND POULTRY

590 Portion controlled sliced fresh whole muscle meat product.

GRANITE STATE PACKING CO

United States 4680187 (1987)

591 Meat roll.

ROTHER KH

Europe 0220748 A2 (1987)

592 Process and mincing machine for comminution of foods, especially meat, under vacuum.

GREBE GMBH & CO

German Federal Republic 3604595 A1 (1987)

593 Process and apparatus for treatment of meat during cooling.

BOURDEL AJ

Europe 0228336 A1 (1987)

594 Process for preparation of meat emulsions.

GREBE GMBH AND CO KG

German Federal Republic 3608859 A1 (1987)

595 Meat pie and its manufacture.

KLEIN K

German Federal Republic 3605828 A1 (1987)

596 Heat shrinkable composite packaging film (suitable for meat packaging).

OKURA INDUSTRIAL CO LTD

United States 4695491 (1987)

597 Procedure for preparation of rillettes.

HUGER G LE

France 2586957 A2 (1987)

598 Composition for improving shelf life of fish fillet.
STAUFFER CHEMICAL CO.
Europe 0230734 A1 (1987)

599 Process for the treatment of raw comminuted fish meat means for implementation of this process and the products thereof.
CAP GRIS NEZ SARL
France 2595035 A1 (1987)

600 Method and apparatus for producing a (simulated shell-fish) food product.
KK IKEUCHI TEKKOSHO
Europe 0239203 A2 (1987)

601 Method for producing a food product simulating shell fish.
KK IKEUCHI TEKKOSHO.
United States 4692 341 (1987)

602 A process for the manufacture of reconstituted squid.
PESCANOVA SA
Europe 0234012 A1 (1987)

603 Poultry spread and method for its manufacture.
CUKAN J.
Czechoslovakia 247345 (1986)

604 Egg package.
TUSKY M
German Federal Republic 8627381 (1987)

605 Egg container.
AMABILI A
Europe 0089664 B1 (1987)

606 Cellular packaging device specially for eggs.
ALPHA FORM
France 2599448 A1 (1987)

607 Pack for eggs with a locking facility and with detachable egg cups.
ALLEAUME J
France 2593475 A1 (1987)

608 Egg decorating kit.
SPEARHEAD INDUSTRIES INC.
United States 4693205 (1987)

609 Process for packaging and preservation of eggs and apparatus for implementation of this process.
CAMBIEN RB
France 2597727 A1 (1987)

610 Process for packaging of meat products, including a step for prevention of microbial contamination and a pack for use in this process.
SOPARIN
France 2597831 A1 (1987)

FRUIT JUICES AND SOFT BEVERAGES

611 Instant beverages and their manufacture.
KRUGER GMBH AND CO
Europe 0230504 A2 (1987)

612 Cover for a stackable crate for beverage bottles.
REHBOCK J
German Federal Republic 3600013 A1 (1987)

613 Plastic closure for beverage container.
SUN COAST PLASTICS INC
Europe 0230772 A2 (1987)

614 A beverage package and a method of packaging a beverage containing gas in solution.
ARTHUR GUINNESS SON AND CO LTD
Europe 0227213 A2 (1987)

615 An improved process for producing a rapidly water-soluble, free-flowing, sugar-free dry beverage.

GENERAL FOODS INC.

Europe 0225684 A1 (1987)

616 Container especially disposable container for beverage concentrates, with a re-usable dispensing device (preferably magnetically-operated) which may be fitted to the outlet.

BOSCH SIEMENS HAUSGERATE GMBH

German Federal Republic 3033874 C2 (1987)

617 Caps of the tear-off-type for bottles containing highly carbonated liquids.

ITALCAPS SPA

Europe 0218562 A2 (1987)

618 Process and apparatus for separating liquid and solid fractions, especially fruit juices.

MAISONNEUVE Y

France 2588725 A1 (1987)

619 Container for fruit juice concentrate.

DEUTSCHE GRANINI GMBH AND CO

German Federal Republic 8709251 (1987)

620 Double-walled coffee bag for rapid preparation of a cup or pot of coffee.

BECKERS M

German Federal Republic 3607111 A1 (1987)

621 Preparation of cafestol.

SOCIETE DES PRODUTS NESTLE SA

Europe 0239730 A1 (1987)

622 Chicory drink and its manufacture.

SARL CHICOREE LEROUX

Europe 0227490 A1 (1987)

623 Process for preparing cold soluble tea product.

SOCIETE DES PRODUITS NESTLE

India 160701 (Aug. 1987)

The patent describes a process for preparing a powdered tea extract where black tea leaves are macerated with water; the macerated leaves are extracted first with cold water and then with hot water after which the cold and hot extracts are mixed before being concentrated and dried. This process may be applied to all kinds of black tea and their blends. The manner of separation of the extract from the tea leaves after both the cold extraction and the hot extraction depends on whether the process is batchwise or countercurrent. The powdered extract obtained thus is instantly soluble in cold water at 15-20 which can then be iced and provides beverages having good stability, palatability and drinking qualities.

SPICES AND CONDIMENTS

624 Process for preparation of a sterile, natural or nature identical pepper flavouring or seasoning.

KARG JE

German Federal Republic 3612345 A1 (1987)

FATS AND OILS

625 Method for making better tasting low calorie fat materials.

PROCTER AND GAMBLE CO

Europe 0233856 A2 (1987)

626 The hydrolysis of fats using immobilized lipase.

AKZO NV

Europe 0232933 A1 (1987)

627 Margarine fat.

UNILEVER PLC

Europe 0233036 A2 (1987)

628 New polyunsaturated fatty acid - rich fat mixture and its use in manufacture of foods for infants.

MILUPA AG

German Federal Republic 3603000A1 (1987)

629 Margarine fat.

UNILEVER PLC

Great Britain 2185990 A (1987)

630 A process for preparing a stabilized pepper mint oil containing reduced menthofurax content.

WARNER-LAMBERT CO

India 160522 (July 1987)

The patent describes an invention which involves preparation of a stabilized peppermint oil adopting the following steps: a) admixing peppermint oil with, from about 0.5% to about 15% by weight maleic anhydride, based on the weight of peppermint oil; b) maintaining the admixture at a temperature of from about 0 C to about 80 C to prepare a reaction admixture containing a menthofuran maleic anhydride adduct within the peppermint oil; c) separating the menthofuran maleic anhydride adduct from the peppermint oil and d) recovering the peppermint oil which contains a reduced menthofuran content.

631 Process for dispersion of essential oils and oleoresins in a carrier solution.

PROCHAR SA

France 2595914 A1 (1987)

632 Purification of fish oils.

SECRETARY OF COMMERCE

United States 4692280 (1987)

633 Method for producing dry edible product by using heated oil.

NAKAZONO S

Europe 0233962 A1 (1987)

DIETETIC AND PROTEIN FOODS

634 Dietetic bread for diabetics.
SCHENEDER L
France 2588159 A1 (1987)

635 Dietetic seasoning.
DIAMALT AG
German Federal Republic 3541802 A1 (1987)

636 A process for the production of a mineral fortified protein composition.
RALSTON PURINA CO
Europe 0234773 A2 (1987)

637 Proc[illegible] for preparing a high protein soybean product.
BILY [illegible] RAYMOND)
India 1[illegible]0584 (July 1987)

According to the invention described in this patent, a high protein whey soybean product is prepared by a process which comprises cooking previously uncooked dry soybeans until they have a firm texture. The cooked soybeans are comminuted in the presence of water to form a uniformly dispersed paste without free water. The soypaste is mixed with whey solids so as to cause the constituents of the whey to react with the comminuted constituents in the paste and form a paste without free water. The mixing process is very important to obtain the necessary results. The product obtained will be far more than the mere aggregation of the effects of the separate ingredients.

MICROBIOLOGY AND FERMENTATION (including alcoholic beverages)

638 Process for activation of microorganiss, used in food processing, by means of lecithin.
LUCAS MEYER GMBH AND CO
German Federal Republic 3540721 A1 (1987)

639 Coagulated food made from brown algae.
KITAHARA N
United States 4690828 (1987)

640 Process for preservation of yeasts.
LOCHNER G
Germany 3625170 C1 (1987)

641 Coconut fruit flavoured brandy.
LIDMAN LLM
United States 4680179 (1987)

642 Manufacture of alcohol free yeast-containing 'Weissbier' beer.
PAULANER SALVATOR THOMASBRAN AG
German Federal Republic 3606450 A1 (1987)

643 Method for manufacture of beer with low utilizable energy content.
CERNY M
Czechoslowakia 241838 (1986)

INFESTATION CONTROL AND PESTICIDES

644 A process for the preparation of a rodent bait.
SHELL INTERNATIONALE RESEARCH MATSCHAPPIJ
India 160881 (Aug. 1987)

The patent describes an invention which is based on the feeding habits which has been observed among rodents namely that they will not nibble at particles if they are small enough. This new approach to the formulation of rodent baitshas the advantage that the bait as a whole need only comprise relatively few lethal particles in order to be effective against a number of rodents because while sooner or later in the feeding session, each rodent can be expected to take into its mouth a poison particle. Hence it is possible to use safely rodent poisons which are lethal and fast acting in very small quantities suitable acute pisons are: carbamates, organophosphates, etc.

WASTE UTILIZATION

645 An improved process for production of oxalic acid from agricultural waste trash.

Deccan Sugar Institute

India 160865 (Aug. 1987)

According to the patent, sugarcane trash has a purity of 97%-98% and hence is a profitable raw material to produce oxalic acid. It also solves the problem of the sugarcane trash disposal. The process involves oxidation with concentrated nitric acid, catalysed by vandium pentoxide in the presence of concentrated sulphuric acid.

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Central Food Technological Research Institute,
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ENGINEERING AND EQUIPMENT

646 Process and equipment for holding a product blend at a specified temperature

STORK AMSTERDAM BV

Netherlands PA 8601221 (1987)

647 Process and device for vacuum sealing of food cans

WOHNER K

German Democratic Republic 245632 (1987)

648 A vacuum pan

BHUSHAN LAL MITTAL,

India 161506 (Dec 1987)

The patent describes an improved construction of horizontal vacuum pan with a rotatable hollow shaft disposed therein, having an inlet connected to a steam and/or vapour source. A heat exchanger is mounted on the shaft in flow communication with the hollow shaft, such that the steam and/or vapour from the hollow shaft flows into the heat exchanger. A coaxial pipe is disposed within the hollow shaft and it is in a flow communication with the heat exchanger for discharge of condensate. The pan has atleast one inlet for introduction of massecuite and an outlet for discharge of the liquor.

649 Apparatus for the manufacture of globulers, granules, small balls or the like from a material, such as sugar

LABORATORIES BOIRON

India 161069 (Oct 1987)

The patent describes an apparatus of a novel type, intended to permit bulk production of a large quantity of small balls from a material which can be atomized in the liquid state whether molten or in solution in a solvent. The total manufacturing time is only 40% of the time at present necessary. The apparatus can be utilized to manufacture all kinds of products of sugar or the like, that is, not only globules or granules for homeopathic medicines but also for candy, dragees and other confectionery.

650 Apparatus for increasing the visibility of discrete morsels contained with a baked food product.

PROCTER AND GAMBLE CO

United States 46907505 (1987)

651 Process and device for washing containers especially bottles

WAHL A

German Federal Republic 2622434 C2 (1987)

652 An improved screening machine

HEIN, LEHMANN (AG)

India 161678 (Jan 1988)

The patent relates to the improvements of a screening machine having a plurality of transverse girders, parallel to one another and arranged transversely to the transport direction of the material being screened. On or between the girders is fitted a flexible screen and the transverse girders which are movable relative to one another are driven by atleast two motion system in such a manner that mutually adjacent transverse girders alternatively move together and apart. The transverse girders are located in separate mutually parallel planes in which the transverse girders of each motion system are located. An acceleration of or reduction in the transport speed of the material to be screened can be achieved by this machine. In this machine, each motion system is movably fixed to a base frame located below it, but such that each system is independent of one another. The vibrational behaviour is easily controllable and there is no generation of relatively powerful vibrations which mutually influence one another. The operating characteristics and operating safety are improved.

653 Sorting machine

GUNSON"S SORTEX LTD

India 161155 (Oct 1987)

The patent describes a sorting machine which observes the light reflected from the surface of objects in order to effect sorting in dependence upon the colour or reflectivity of the objects. In this invention, the sorting machine comprises means for causing a plurality of objects, to pass sequentially downwardly along a path extending past a plurality of spaced apart viewing zones to a separation zone in which relative separation is effected between desired and undesired objects.

654 Pumps for delivering viscous liquids

FOOD SPECIALITIES LTD, NEW DELHI

India 161668 (Jan 1988)

This is a patent describing a pump for delivering sauces, ketchups and such other viscous liquids from their containers. The pump comprises a cap shaped head having a laterally extending

spout connected to the upper end of a downwardly and co-axially extending tube, a cap shaped, plunger of resilient material fixed to the lower end of the tube. The plunger is located within a tubular socket, a spring within the socket bearing against the plunger and a tube of flexible or resilient material fitted to the lower end of the socket, the cap-shaped head with coaxial tube being adapted to act on the plunger when pressed and released.

655 An improved rice hulling apparatus

SOICHI YAMANOTO

India 161115 (Oct 1987)

The patent describes an improved rice-hulling apparatus with improved vibratory grain separating means for separating hulled and unhulled rice from a mixture thereof. The apparatus is integrally assembled and the size of the vibratory grain separating apparatus is minimized.

656 A peeler for vegetables

AGROMACHINES LTD

India 161574 (Dec 1987)

The patent describes a peeler for the peeling of tuber vegetables which comprises of a chamber with a rotatable plate disposed therein. The plate has a plurality of serrations so as to cause peeling of the vegetables fed on to the plate upon rotation. An inlet is provided in a sidewall of the chamber for introducing vegetables horizontally on to the plate and outlet is provided in another sidewall of the chamber for removal of the peel.

657 A grater for vegetables

AGROMACHINES LTD

India 161575 (Dec 1987)

The patent refers to a grater for grating of tuber vegetables which comprises of a housing with a rotatable grater plate, an inlet for introduction of the vegetable feed and an outlet for the discharge of the grated vegetables. There is an inclined base plate disposed below the grater plate for allowing discharge of the grated vegetable through the outlet. The rotatable grater plate has a plurality of teeth on its surface for causing grating of the vegetable and an discharge zone for the grated vegetables is formed between the edge of the grater plate and housing wall.

658 A device for making puris, chapatis and the like.

BASTIMAL JAIN

India 161112 (Oct 1987)

The patent describes a device for making puri, chapati or the like from doughy material, comprising of two flat plates hinged to each other at one end and a handle hinged by a pin joint to the upper plate. A piece of dough is placed between upper and lower plates. The upper plate is lowered and pressed by the handle in one action. The dough is thus flattened. Much time and labour is saved in comparison to such known devices.

659. Improvements in or relating to a fish mincing machine

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, New Delhi

India 161527 (Dec 1987)

The patent describes a fish mincing machine wherein the trash fishes of different sizes can be minced to controlled sizes for further processing in cooking and drying operations in fish meal plants, with minimum operational cost and at a faster rate The machine comprises a series of running blades which rotate in a housing by a motor, across an adjustable wedge shaped fixed blade fixed on a boxtype pedestel to execute shearing of trash fish being fed by a hopper. The running blades are mounted in pairs on a double cone rotor constituted of two conical parts having three pairs of angular sockets for holding the running blades at an inclination of 10° to the radial and the sockets imparting automatic push feeding of the material to the shearing zone. The rotor is rotatably connected to the motor.

660 Milk pouring device

McCRYSTAL J

United Kingdom 2186557 (1987)

661 Improved tea leaves spreader

STEEISWORTH PVT LTD

India 161341 (Nov 1987)

The patent describes spreaders for materials such as grains, seeds, leaves and cut material of small sizes on a conveyor belt. Such spreaders can be used for spreading tea leaves on a conveyor belt on a CTC machine, for spreading coffee seeds, cocoa beans, tobacco leaves etc. The present spreader is an improvement over the earlier ones in that it will do away with the two different units employed, has a simple construction, is efficient in operation and will consume less power.

PRESERVATION AND PACKAGING

662 Preparation of foodstuffs for microwave cooking
WYNNE S
United Kingdom GB2189977 (1987)

663 Process for improvement of sterilization of foods
KETTLITZ B
German Democratic Republic 246249 (1987)

664 Microwave sterilization process
HUNT EH
United Kingdom GB2189997A (1987)

665 Process for decontamination of radioactively contaminated foods
PRATZEL H
German Federal Republic DE 3615518 A1 (1987)

666 Process and apparatus for freezing liquid or semiliquid foods in the form of essentially uniform pellets
ANDERSSON A
Europe 0250381 A2 (1987)

667 Method for producing frozen foods
AJINOMOTO CO INC
United States 470888 (1987)

668 Method for preparation of a blanched product, plastics packs containing a blanched product, and device for preparation of blanched products
WAVIN BV
Netherlands 6600799A (1987)

669 See-thru metallic food wrapper
ALTUS M
United States 4697732 (1987)

670 Silicone elastomer thread for packaging of foods to be cooked

LAGARDE R

Europe 0234168 (1987)

671 Tubular casing for food packaging and flat film for its production

HOECHST AG

Europe 0140250 B1 (1987)

672 Procedure for sealing of tubular packs, especially sausage casings with U shaped clips and storage container and device for use in this procedure

KOLLROSS G

German Federal Republic 3617557A1 (1987)

673 Storage and transport container for foods

LANGNER G

German Federal Republic 3619176A1 (1987)

674 Container for storing food

LEGION INTERNATIONAL

PCT International 87/06992 (1987)

675 A refrigerated transport unit

WEASEL (George E)

India (Sept 1987)

The patent describes a device to transport fresh produce, which is sturdy, compact, durable, lightweight, simple, safe, efficient, versatile, ecologically compatible, energy conserving and reliable, yet inexpensive and easy to manufacture, operate and maintain. The refrigerated transport unit therefore comprises an enclosed air-tight body having front and side walls, a top and a floor, doors on said enclosed body for loading cargo and insulation in the walls, top, floor and doors of the said body. It has a water sprinkler unit within the body attached to the top of the body, a water inlet fluidly connected to the sprinkler unit and a supply of liquid nitrogen within the body.

676 Process for vacuum packaging of items and packs prepared by this process
DIXIE-UNION VERPACKUNGEN GMBH
German Federal Republic 3617569 (1987)

677 Box for packaging round, rounded, oblong, oval, square or rectangular articles, and packaging of such articles
CARTONNERIES DE SAINT GERMAIN
France 2594798 A1 (1987)

678 Fast food take out carton with cover
MORROCCO DM
United States 4714190 (1987)

679 Package assembly including a multi surface microwave interactive tray
JAMES RIVER CORP
Europe 0242026 (1987)

680 Composite tray-type pack with cover and strap mechanism
SA ICP
France 2593779 (1987)

68: Polyethylene/polyester nonoriented heat sealable moisture barrier film and bag
PRESTO PRODUCTS INC
United States 4705707 (1987)

682 Improvements in or relating to bag made from thin plastic sheet for storing and preserving articles in vacuum
PRIYAL KHANDERAO KULKARNI, PUNE
India 161584 (Dec 1987)

The patent describes a bag made from thin plastic sheet for storing and preserving any article in vacuum, the mouth of bag comprises of a configuration of having two openings formed by sealing of a trapezoidal portion on the mouth so that a small straight of tapered opening is formed at one end of the mouth of thebag and a larger opening on the other side of the sealed portion so that the larger opening be used for filling any article and the smaller opening is used for evaculating air from the bag.

CHEMISTRY AND ANALYSIS

683 Process for reduction of the nitrate content of foods of plant origin
NITRATGEHALTS VON PFLANZLICHEN LEBENSMITTELN
German Federal Republic 3615321 A1 (1987)

684 Reusable lid for beverage cans
GEREN KLM
United States 4703873 (1987)

FOOD ADDITIVES

685 Antimicrobial preservative compositions
KABARA JJ
Europe 0244144A1 (1987)

686 Method for purification of carotene-containing concentrate
HAMA I
Europe 0242148 (1987)

687 Bakery additive for yeast doughs
JODLBAUER HD
German Federal Republic 3616597 (1987)

688 Enzyme-containing bakery additive
ROHM GmbH
German Federal Republic 3617473 (1987)

689 Flavouring method for fried food products
CONAGRA INC
United States 4710391 (1987)

690 Improved flavour
UNILEVER NV
Europe 0105640 B1 (1987)

691 Process for manufacture of cocoa flavour preparations
RODEL W
German Democratic Republic 239942 (1986)

692 Process for preparation of a cocoa flavouring
ROTHE M
German Democratic Republic 243638 (1987)

693 Potato flavour enhancing composition method of use
WILLARD MJ
United States 4698230 (1987)

694 Solid essential oil flavour composition
SUNKIST GROWERS INC
United States 4707367 (1987)

695 Barrier laminates for contaminent of essential oils flavours, oxygen and vitamins and cartons made therefrom.
CHAMPION INTERNATIONAL CORP
Europe 0241819 (1987)

696 Extraction and intensification of anthocyanins from grape pomace and other material
UNITED VINTERS INC
Europe 0096481 B1 (1987)

697 Substance useful as a thickening agent and/or emulsion stabilizer
KAWAGUCHI K
Europe 0247899 A2 (1987)

698 Preparation of binding agents for sauces and gravies
BRUCKNER J
German Democratic Republic 249846 (1987)

699 A water binding and gelatinising agent prepared from defatted pork rind and a process for its preparation

GRINDSTED PRODUCTS A/S

Europe 0241896 A2 (1987)

700 Gel confections

AE STALEY MANUFACTURING CO

United States 4704293 (1987)

701 Process for preparation and stabilization of food emulsions and foams

MIETH G

German Democratic Republic 247835 (1987)

702 Gum for use in confectionery

KOBENHAVNS PETINFABRIK

Europe 0246628 A2 (1987)

703 Guar gum food bar

NABISCO BRANDS INC

Europe 0127287 (1987)

704 Process for the preparation of modified guargum

OIL AND NATURAL GAS COMMISSION, DEHRA DUN

India 161482 (Dec 1987)

The patent describes a process for the preparation of hydroxypropyl guargum. The product has a useful application in oil wells as fracturing fluid, workover and completion fluids. The process comprises of preparing an aqueous dispersion of guargum in an alkaline medium, such as sodium hydroxide; reacting the aqueous dispersion with propylene oxide at a temperature not exceeding 80°C; maintaining the reaction mixture under agitation, cooling the reaction product; subjecting it to the step of neutralization and filtration to obtain hydroxypropyl guargum. This is then washed, dried and subjected to the step of grinding.

705 Process for preparation of lecithin
HEIGEL W
German Federal Republic 3011185 C2 (1988)

706 Process for manufacture of seasonings
DUAN L
German Democratic Republic 249845 (1987)

707 Method for producing sugar-added margarine
MITSUBISHI DENKI (KK)
Europe 0250827 A1 (1988)

708 Substitute composition for cocoa butter
KAO CORP
United States 4705692 (1987)

709 Process for manufacture of cocoa powder substitutes
WALPUSKI J
German Democratic Republic 245355 (1987)

710 Natural blue dye composition and colourant using the same
KOGA K
Europe 0251063 A2 (1988)

CEREALS AND MILLETS

711 Low calorie cereal and process for preparing the same
TERUMO KK
Europe 0251925 A2 (1988)

712 All natural, ready to eat enzyme saccharified cereal derived from whole cereal grain
GENERAL FOODS CORP
United States 4710386 (1987)

713 Process for preparation of a powdered mixture of cereal flour with lecithin

GRIVEAU J

Europe 0238766 (1987)

714 Method and composition for use in preparing glazed microwave popcorn product.

EA-SWEEN CO

Europe 0242828 A2 (1987)

PULSES, OILSEEDS AND NUTS

715 Process for the extraction of protein from soy flour

GENERAL SPICE INC

United States 4704289 (1987)

716 Method for processing of fat-rich oilseeds

MIETH G

German Democratic Republic 249917 (1987)

717 Preparation of acylated rapeseed protein for food use

SCHWENKE KD

German Democratic Republic 236448 (1986)

718 Method for determination of total glucosinolates in rapeseed or rapeseed meal

SCHNUG E

German Federal Republic 3701163 A1 (1987)

TUBERS, VEGETABLES AND FRUITS

719 Process for preservation of partially processed fruit and vegetable products

SPIESS A

German Democratic Republic 241561 (1986)

720 Procedure and machine for coating of fruit and vegetables with plastics film
XEDA INTERNATIONAL
Europe 0156718 (1987)

721 Vegetable food pattie composition and process
MITRA G
United States 4705693 (1987)

722 Process for preservation of vegetable products
MERCATI VF
Europe 0243567 A2 (1987)

723 Manufacture of a fritter-type vegetable product
RATHENOW Y
German Federal Republic 3617478 A1 (1987)

724 Method and device for hollowing out and filling of potato pieces
MECHANICAL ENGINEERING ALPHEN BV
Netherlands 8600854 A(1987)

725 Ingestible, high density, compressed-tablet fruit fiber composition
SCHUMACHER RW
United States 4710390 (1987)

726 Crunchy fruit brittle product and process
FRITO LAY INC
Europe 0251753 A2 (1988)

727 Process for rehydration of freeze dried fruit
JACOBS SUCHAND AG
Europe 0234296 (1987)

728 Process for preparation of fruit paste products and the products obtained
LA VOSGIENNE
France 2594301 A1 (1987)

729 Culture and preservation of strawberries and raspberries
COTTON-HALLER P
Europe 0243225 A2 (1987)

730 Process for manufacture of long shelf life products based on dried bananas
KORN H
Switzerland 661410 A5 (1987)

731 Method for treating pineapples
DEL MONTE CORP
United States 4710388 (1987)

SUGAR, STARCH AND CONFECTIONERY

732 A process for the preparation of high fructose syrup from glucose
FOREST RESEARCH INSTITUTE AND COLLEGE, Dehra Dun.
India 161264 (Oct 1987)

The patent relates to a process for the preparation of high fructose syrup from starch, the syrup having a low-calorific value on lb/lb basis, light colour solution and bacterial stability due to high osmatic pressure. Glucose is subjected to alkaline isomerization by treatment with an ion exchange resin at an alkaline pH maintained by the addition of an alkaline catalyst.

733 Process for preparation of D-Glucose and starch hydrolysates
HOHAUS W
German Democratic Republic 238305 (1986)

734 Soft starchy chewing gum
LOTTE CO LTD
United States 4707363 (1987)

735 Low-calorie, sugar-free chewing gum containing polydextrose
GENERAL FOODS CORP
Europe 0123742 B1 (1987)

736 Chewing gum composition and method of sweetening
WM WRIGLEY JR CO
Europe 0129584 B1 (1984)

737 Process for preparing a non-adhesive chewing gum base composition
WARNER-LAMBERT CO
India 161215 (Oct 1987)

The patent describes chewing gum compositions that do not adhere to dentives, removable and fixed oral prostethic devices, fillings or natural teeth. In addition it imparts strong long-lashing flavour impact and breaks freshening power. It exhibits rapid processing resulting in soft and pliable chewing gum consistency with a uniform chew character throughout the chewing period.

738 Polyvinylacetate bubble gum base composition
WARNER-LAMBERT CO
Europe 0242325 (1987)

739 Soft sugarless aerated confectionery composition
WARNER LAMBERT CO
United States 4714620 (1987)

740 Method for preparation of a base for milk chocolate
VERENIGDE COOPERATIEVE MELKINDUSTRIE COBERCO BA
Netherlands 8601256A (1987)

BAKERY PRODUCTS

741 Process for extruding dough as used in producing crisp breads
NABISCO BRANDS INC
United States 4698228 (1987)

742 Bread premix and its use

HOFMEIR H

German Federal Republic 3614465 A1 (1987)

743 Process for manufacture of laminated pastry

LORENZ HJ

German Federal Republic 3617547 (1987)

744 Batters containing high amylose flour for microwaveable pre-fried foodstuffs

NATIONAL STARCH AND CHEMICAL CORP

Europe 0157800 (1987)

745 Process for manufacture of zwieback rusks

TSCHEUSCHNER H

German Democratic Republic 237607 (1986)

746 Procedure for preparation of a breakfast cake honey cake by manufacture of a dough from sweetener, water, flour and optionally lactic acid and baking the dough, and a cake made by this procedure

HEMMER JCP

Netherlands 8600997 A (1987)

MILK AND DAIRY PRODUCTS

747 Calcium-fortified milk

BORDEN INC

United States 4701329 (1987)

748 Packaging for example for cultured milk products enabling eating usi the toungue

VERDIER P

France 2595658 A1 (1987)

749 Fermented milk products and process for producing said products

UNILEVER NV

Europe 0233566 A2 (1987)

750 Butter-like concentrate
LEVER BROS CO
United States 4701335 (1987)

751 Process for preparing a tofu cheese and product
PIRELLO RJ
United States 4701332 (1987)

752 Stackable cardboard packages, palletized in units or in groups, especially for the transport of whole cheeses
SA BILLERUD EMBALLAGE
Europe 0234958(1987)

753 Emulsification system for creamy cheese food products
HORAN WJ
United States 4713255 (1987)

754 Process for the manufacture of higher solids cheese
KRAFT INCORPORATED, DELWARE
India 161200 (Oct 1987)

The patent describes the manufacturing of American-type cheeses, including cheddar type cheeses or pre-cheese materials which are called higher solids cheese (i.e. cheese which have solids contents on excess of60%) from milk. These cheese are stable and do not oil-off. They are manufactured by processing a retentale with evaporation techniques. Such cheese have a substantial percentage of parakappa casein and the loss of macropeptides is avoided.

755 Method of producing low-fat whey proteins
EXPRESS FOODS GROUP LTD
Europe 0243544 (1987)

756 Process for preparation of whey protein suspensions
BORGWARDT J
German Democratic Republic 236449 (1986)

757 Microcrystalline tableting excipient derived from whey
IGENE BIOTECHNOLOGY INC
United States 4670251 (1987)

758 Process for recovery of lactose from whey by means of zeolities
FIRMA FRITZ GUHT
German Federal Republic 3608322 A1 (1987)

759 A coagulant for a novel yoghurt-like food, and novel yoghurt-like foods manufactured with use of the coagulant
FUJISAWA PHARMACEUTICAL CO LTD
Europe 0244152 A2 (1987)

760 Powdered compositions for the manufacture of soft yoghurt ice cream
DEVSHONY S
Europe 0240326 A2 (1987)

761 Process for producing ice cream, milk shakes, sorbet, frozen confectionery, etc. from pumpable products
WALDEMAR M
Europe 0225989 (1987)

762 Process for manufacture of a dry expanded product based on casein and application of this product
SOCIETE DES PRODUITS NESTLE SA
Europe 0202484 (1987)

MEAT, FISH AND POULTRY

763 Cook in meat packaging
WR GRACE AND CO
Europe 0127296 B1 (1988)

764 Process for vacuum packaging fresh meat products
GEO A HAMEL AND CO
Europe 0245033 A1 (1987)

765 Improvement to products to be sliced, such as cooked or semi-cooked ham
NOULIN JM
France 2594649 A1 (1987)

766 Process for preparing clam cutlet
ROME HM
United States 4715091 (1987)

767 Process and device for cleaning the abdominal cavity of fish
WRUCK S
German Democratic Republic 247374 (1987)

768 Process for preparation and preservation of fresh fish and the resulting product
SCHUTZ J
France 2594007 A1 (1987)

769 Method of preparation of fish noodle
KK IRIFUNE
United States 4704291 (1987)

770 Method for preparing fish egg like edible products
UEDA T
United States 4702921 (1987)

771 Poultry processing
BP CHEMICALS LTD
Europe 0247803 A2 (1987)

772 Egg carton with overwrap
WALLIS ME
United States 4699311 (1987)

773 Egg pack with glued on card lid

D'ARRAS H

Europe 0243282 A1 (1987)

774 Pack for delicate items such as eggs and packaging method

GUEGAN L

Europe 0246173A1 (1987)

775 Procedure for opto-electronic classification of eggs by weight

BERGEMANN W

German Democratic Republic 244905 (1987)

FRUIT JUICES AND SOFT BEVERAGES

776 A beverage and method for making a beverage for the nutritional supplementation of calcium in humans

CLARK GH

Europe 0246177 A2 (1987)

777 An improved process for the manufacture of siphon cartrides for the preparation of pre-flavoured, pre-aromatised or pre-disinfected carbonic liquids for human consumption

GYORGY TIMAR, Budapest

India 161642 (Jan 1988)

The patent describes a process for the production of carbonic liquid suitable for human consumption by a readily feasible single method under eliminating the use of syrup concentrates having a high carbohydrate content and involving hygienic and sanitary hazards. The process eliminates the consumption of soft drinks prepared by using granulated sugar. Hence the risks of obesity and caries are eliminated. It also enables reasonable readily feasible disinfection of non-purified water. The technology of manufacture is a simple one.

778 Process for preparation of agglomerated instant beverage powders
FARBER I
German Democratic Republic 247836 (1987)

779 Juice sterilization process
PROCTER & GAMBLE CO
Europe 02547245 A1 (1987)

780 Heat sealable barrier material for improved juice packaging
INTERNATIONAL PAPER CO
Europe 0245921 A2 (1987)

781 Process for the preparation of a drink based on alimentary vegetable extracts and drink so obtained
MUSETTI A
Europe 0242493 (1987)

782 Process for enzymic clarification of apple juice
LEUCHTENBERGER A
German Democratic Republic 246025 (1987)

783 Process for kilning of malt
SEEGER GmbH
German Federal Republic 3007143C2 (1987)

784 Process of steaming and percolating coffee
VOGEL GJ
United States 4707368 (1987)

785 A process for decaffeinating green coffee
KAPER L
Europe 024848 (1987)

786 Process for recycling of practically caffeine-free coffee extract constituents to coffee beans decaffeinated by extraction with an aqueous liquid

HACO AG

Switzerland 661409 (1987)

787 Process for preparation of a mixture for a fruit flavoured tea beverage - the beverage produced and its use

GREITHER O

German Federal Republic 3619912 A1 (1987)

788 Teabag with drawstrings

BRAUN KD

German Federal Republic 8707075 (1987)

789 Enzymatic method for production of instant tea

NOVO INDUSTRIES

India 161090 (Oct 1987)

The patent describes an enzymatic method for the production of instant tea, wherein the tea leaves in an aqueous medium before and/or during extraction of the tea leaves are treated with an SPS-ase preparation having a minimal initial concentration corresponding to an SPS-ase activity of 10^{-3} SPS U/g of 10^{-3} SPS U/g of tea leaves

790 Instant beverages and instant teas and their manufacture

KRUGER GmbH and CO KG

Europe 0099557 B1 (1987)

791 Process for preparation of an agglomerated cocoa product

EHRLICH H

Europe 0109454 (1987)

SPICES AND CONDIMENTS

792 Process for manufacture of ready to cook soups and sauces

PETZOLD H

German Democratic Republic 248502 (1987)

793 Dry mix composition for home preparation of gravies
DURKEE FAMOUS FOODS INC
United States 4704294 (1987)

FATS AND OILS

794 Low calorie fat materials that eliminate laxative side effect
PROCTER AND GAMBLE CO
Europe 0236288 A2 (1987)

795 A process for the solvent fractionation of fats into atleast 2 fractions
SOCIETE DES PRODUCTS NESTLE (SA)
India 161535 (Dec 1987)

The patent relates to a process for the solvent fractionation of fats into atleast 2 fractions including a first high-melting glyceride fraction and a second fraction that is an oil at temperature above 10°c with unique properties suitable for use as speciality fats. The fractionation process may be a simple one step crystallization process which yields only a high melting fraction and an oil or it may be a more elaborate scheme with two crystallization steps to produce three fractions, a high melting fraction, an intermediate or middle melting fraction and an oil.

796 Preparation of fat emulsions for food use
MIETH G
(German Democratic Republic 249627 (1987)

797 Method for extracting food oil from seeds and or oil fruits and product obtained therefrom
BAGLIONI A
PCT International 87/06606 A2 (1987)

798 Vegetable oil extraction process
STROP HR
PCT International 87/06431 (1987)

9 A process for reducing the diterpene content of coffee oil

SOCIETE DESP PRODUITS NESTLE, Switzerland

India 161534 (Dec 1987)

The patent describes a process for reducing the diterpene content of coffee oil characterised in that the coffee oil is initially heated to a temperature of from 150°C to 270°C for a period of from 1 minute to 6 hours, then cooled with the addition of atleast 50% by weight of isopropanol, extracted with an aqueous isopropanol solution in which the amount of aquesous isopropanol solution is atleast 0.5 parts by weight per part by weight of coffee oil, after which the oil layer is separated from the aqueous isopropanol layer.

The separated oil has satisfactory oxidative stability and is of a quality comparable to edible vegetable oils and it may be subjected to further conventional technological treatments before being used as an edible vegetable oil. The separated oil may be used for aromating soluble coffee powder, by spraying on to the coffee powder in the form of an emulsion with coffee aroma.

DIETETIC AND PROTEIN FOODS

0 Process for preparation of dietetic food and beverage powders or granulates

HOFFMANN K

German Democratic Republic 247602 (1987)

1 Use of iron (III) phosphate compounds for iron fortification of food products. A method of preparing iron fortified food products and the iron-fortified food products

EKA NOBEL AB

PCT International 87/06433 (1987)

2 Process for producing iron-rich foods

TERUMO KK

PCT International 87/06103 (1987)

3 Process for production of protein food material

GENERAL FOODS CORPORATION

India 161568 (Dec 1987)

803 Process for production of protein food material

GENERAL FOODS CORPORATION

India 161568 (Dec 1987)

The patent describes a process for the production of protein food material which, on being reconstituted with cold water or hot water, assumes texture, appearance and palatability resembling natural meats. The process is simple and economical. The protein-containing substance is kneaded with water, and the resultant blend is oriented in a thermally plasticized state.

804 Polyenic acid-rich fat composition and its use in the preparation of infants' food

MILUPA AG

Europe 0231904 A2 (1987)

MICROBIOLOGY AND FERMENTATION (including alcoholic beverages)

805 Microbial treatment of glucosinolate-containing raw materials of plant origin

KUJAWA M

German Democratic Republic 242344 (1987)

806 Method for genetically marking yeast

CLARK-WALKER GD

PCT International 87/03298 A1 (1987)

807 A process for manufacturing a mixture of butanol, acetone and ethanol by fermentation of sugars

INSTITUT FRANCAIS DU PETROLE

India 160986 (Aug 1987)

The patent describes a process for manufacturing a mixture of butanol, acetone and ethanol by fermentation of sugars in the presence of a clostudium acetobutylicum mutant characterized in that the mutant obtained under anaerobic conditions by spreading out an aqueous dispersion of a clostridium acetobutylicum strain at the surface of a series of solid culture media containing n-butanol at different concentrations, setting a mutagenic agent at the surface of the culture media; subjecting the resultant media

to growth conditions for the strain and selecting a medium wherein the strain forms an aureole comprising mutants of increased capacity to produce butanol, acetone and ethanol.

808 Process for manufacture of alcohol-reduced or alcohol-free beer

DZIONDZIAK K

German Democratic Republic 3616093 (1987)

809 Process and apparatus for the preparation of a sweet wort

CLEXTRAL, France

India 161377 (Nov 1987)

The patent describes a process and an apparatus for the preparation of a sweet wort (or must wort) from cereal, particularly for the preparation of a beer or a similar beverage. This process is more economical than the earlier ones in that the proportion of malt to be used is reduced. In this process the cereal is mashed with water then mixed with a hydrolyzing substance introducing enzymes to the extent of about 40% to undergo a saccharification treatment in which process, the cereal is before mashing subjected to a cooking-extrusion treatment carried out at a temperature of atleast 100°C by passage continously of the cereal with about 5% water. The apparatus comprises a cooking - extrusion device for the cereal, placed upsteam of the mashing device and constituted by a screw extrusion machine provided with heating means, in which the cereal undergoes the cooking extrusion under pressure at a temperature above 100°c.

INFESTATION CONTROL AND PESTICIDES

810 Process for the preparation of a tetralyl-substituted 4-hydroxy coumarin compounds

SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ

India 161543 (Dec 1987)

The patent describes a process for the preparation of a tetralyl substituted 4-hydroxy coumarin compounds useful as anti-coagulants. Such compounds include those of particular usefulness as rodenticides and the invention also includes rodenticidal compositions (baits) in which anti-coagulant compounds in accordance with the present invention provide the rodenticide component

WASTE UTILIZATION

811 A method of hydrolyzing a coffee extraction residue material to produce mannan oligomers.

GENERAL FOODS CORPORATION

India 161664 (Jan 1988)

The patent describes a method of hydrolyzing a coffee extraction residue material such as the spent grounds from a commercial coffee percolation system, in a reactor in the presence of an acid catalyst. A tubular plug flow reacter is convenient, although any reactor providing for the relatively high temperature short time reaction will-suffer. The hydrolysate so produced is a mannan oligomer mixture having oligomers ranging from DP1 to DP 10. The mannon oligomer hydrolysate is useful for increasing the soluble coffee solids content in combination with an aqueous extract of roasted coffee.

Acylated rapeseed protein 717
Agglomerated cocoa product 791
Agglomerated instant beverage powder 778
Alcohol-reduced beer 808
Anthocyanin extraction, grape pomace 696
Amylose-high flour (for) microwaveable pre-fried food 744
Anti-coagulants (from) 4-hydroxy coumarin compounds 810
Antimicrobial preservatives, food 685
Apple juice, enzymic clarification 782

Bag, heat-sealable (made of) polythylene/polyster film 681
Bakery additive
(for) yeast dough 687
(with) enzyme 688
Banana-dried, preservation 730
Beer, alcohol-reduced 808
Beverage, calcium supplementation 776
Beverage can, reusable lid 684
Beverage powder-instant 778
Beverage powder/granulates preparation process 800
Binding agent
(for) sauces/gravies 698
(from) defatted pork rind 699
Blanched food (in) plastic packs 668
Blue dye colourant 710
Bottle washing device 651
Box (for) packaging different shaped food 677
Bread, premix 742
Bread-crisp, manufacture 741
Brittle product (from) fruit 726
Bubble gum base polyvinylacetate 738
Butter-like concentrate 750

Caffeine-free coffee extract 786
Cake-honey, preparation process 746
Calcium-fortified milk 747
Calcium supplementation beverage 776
Calorie-low cereal 711
Calorie-low chewing gum (with) polydextrose 735
Calorie-low fat 794
Can, vacuum sealing 647
Carbonic liquids (for) human consumption 777
Card board package (for) cheese transport 752
Carotene-containing concentrate, purification method 686
Carton (with) cover 678
Casein (in) dry food manufacture 762
Cereal
enzyme-saccharified 712
low-calorie 711
Cereal flour/lecithin powder mixture 713
Chapathi/Puri making device 658
Cheese, transport (use of) cardboard package 752
Cheese (with) high solid content 754
Chewing gum 734-736
Chewing gum base, non-adhesive 737
Chocolate-milk, base 740
Clam cutlet 766
Cleaning device, fish 767
Clips (for) tubular pack sealing 672
Coagulant (to make) yoghurt-like food 759
Cocoa butter-substitute 708
Cocoa flavour 691, 692
Cocoa powder substitute 709
Cocoa product - agglomerated 791
Coffee
Decaffeination 785, 786
Percolating/steaming process 784
Coffee extraction residue hydrolysate (to produce) mannan oligomer 811
Coffee oil, diterpene content reduction 799
Confectionery-aerated, sugarless 739
Confectionery (use of) gum 702
Container (for) food storage 673, 674

Contaminated food radioactive effect 665
Cooked ham 765
Cooking-microwave 662
Creamy cheese, emulsification system 753
Crunchy fruit brittle product 726
Cutlet (from) clam 766

Decaffeination, green coffee 785
Decontamination, food 665
Dietetic food, preparation process 800
Dry food manufacture (based on) casein 762
Dry mix, gravy 793
Dye-natural 710

Egg, carton (with) overwrap 772
Egg,
fish 770
opto-electronic classification 775
Egg pack (with) glued-on-card lid 773
Emulsification system (for) creamy cheese 753
Emulsion
fat 796
food 701
Emulsion stabilizer, food 697
Enzymatic method, instant tea 789
Enzyme saccharified cereal 712
Enzymatic clarification, apple juice 782
Essential oil flavour 694, 695
Ethanol/Acetonel Butanol (by) sugar fermentation 807
Extraction, oil 797, 798
Extruding process, dough (for) crisp bread manufacture 741

Fat
Emulsion 796
Low-calorie 794
Oilseed 716
Polyenic acid-rich 804
Solvent extraction 795
Fat-low whey (for) protein production 755
Fermentation sugar (for) manufacture (of) Ethanol/Butanol/Acetone mixture 807
Fermented milk products 749
Filling device, potato pieces 724
Fish, cleaning device 767
Fish, preservation 768
Fish egg-like product 770
Fish mincing machine 659
Fish noodle 769
Flat film (for) tubular casing, food 671
Flavour additive, food 690-695
Flavouring method (for) fried food 689
Fortification-iron, food 801, 802
Freeze dried fruit, rehydration 727
Freezing, liquid food 666
Fried food, flavouring method 689
Fritter-type vegetable food 723
Frozen food, production 667
Fructose high syrup (from) glucose 732
Fruit, freeze-dried, rehydration 727
Fruit/Vegetable
coating (with) plastic film 720
partially processed, preservation 719
Fruit flavoured tea 787
Fruit paste 728
Fruit fiber, compressed form 725
Fruit product-crunchy 726

Gelatinising agent (from) defatted pork rind 699
Gel confections 700
Glucose (to make) high fructose syrup 732
Glucose-D, preparation process 733
Glucosinolate, Rapeseed 718
Glucosinolate-containing raw material (from) plant 805
Granules making apparatus 649
Grape pomace, anthocyanin extraction 696
Grater (for) tuber vegetables 657
Gravies/Sauces, Binding agent 698
Gravy, dry mix 793
Guargum-hydroxy propyl 704
Guargum food bar 703
Gum (used in) confectionery 702

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Ham, cooked 765
Honey cake preparation process 746
Hydroxy coumarin compounds (as) anti-coagulants 810

Icecream, production process 767
Infant food (use of) polyenic acid rich fat 804
Instant beverage powder-agglomerated 778
Instant tea
enzymatic method 789
manufacture 790
Iron-rich food 802
Iron fortification (of) food 801

Juice (from) vegetable 781
Juice, packaging material 780
Juice sterilization 779

Kilning process, malt 783

Lactose recovery, whey 758
Laminated pastry 743
Laxative effect eliminated fat 794
Lecithin, preparation process 705
Liquid food freezing 666
Liquid-viscous, delivery pump 654

Malt kilning process 783
Mannan oligomer (from) coffee extraction residue hydrolysate 811
Marking, yeast 806
Meat, packaging 763, 764
Microbial treatment, plant food 805
Microcrystalline tablet (from) whey 757
Microwave interactive tray 679
Microwave cooking 662
Microwave popcorn 714
Microwave sterilization, food 664
Microwaveable pre-fried food stuff (from) high amylose flour 744
Milk-calcium-fortified 747
Milk-cultured, product packaging 748
Milk chocolate base 740
Milk pouring device 660
Milk products-fermented 749
Milk shake, production process 761
Mincing machine, fish 659
Morsel deteching apparatus, baked food 650

Nitrate reduction, plant food 683
Noodle (from) fish 769

Oil-coffee, diterpene content reduction 799
Oil, extraction method (from) oilseed 797
Oilseed, fat 716
Opto-electronic classification, egg 775
Overwrap, egg carton 772

Pack (for) egg 772-774
Packaging, cultured milk products 748
Packaging, meat 763, 764
Packaging (of) raw food 670
Packaging box (for) food (with) different shapes 677
Packaging material, juice 780
Pastry-laminated 743
Pattie (from) vegetable food 721
Peeler (for) tuber vegetables 656
Percolating process, coffee 784
Pineapple, treatment 731
Plant food, nitrate reduction 683
Plastic bag (for) vacuum preservation, food 682
Plastic fiom (for) coating (of) fruit/vegetable 720

Plastic pack (with) blanched food 668
Polydextrose (in) low-calorie chewing gum 735
Polyenic acid-rich fat (used in) infant food 804
Polyethylene/polyester heat-sealable bag 681
Polyvinylacetate bubble gum base 738
Popcorn, microwave preparation process 714
Pork rind-defatted (to make) binding agent 699
Potato flavour 693
Potato pieces, filling device 724

Poultry, processing 771
Pouring device, milk 660
Preservation, Lanana-dried 730
Preservation,
  fish 768
  partially-processed vegetable/fruit 719
  strawberry/raspberry 729
  vegetable food 722
Preservative - antimicrobial food 685
Processed-partially fruit/vegetable 719
Protein (from) 755, 756
Protein acylated (from) rapeseed 717
Protein extraction (from) soyflour 715
Protein food, production 803
Pump (for) viscous liquids 654
Puri/Chapati making device 658

Rapeseed
  glucosinolate 718
  protein 717
Raspberry, preservation 729
Refrigerated transport container (for) food 675
Rehydration, freeze-dried fruit 727
Reusable lid (for) beverage can 684
Rodenticide (from) Tetryl-substituted 4-Hydroxy coumarın compounds 810
Rusk, manufacture 745

Sauce/soup, ready-to-cook 792
Sauces/Gravies, binding agent 698
Sausage casings, sealing (with) U-shaped clips, 672
Screening machine (with) transverse girders 652
See-through metallic wrapper (for) food 669
Sealing (of) tubular packs (with) U-shaped clips 672
Seasonings, manufacturing process 706
Silicone elastomer thread (for) raw food packaging 670
Solvent extraction, fat 795
Sorting machine (based on) objects light reflectivity 653
Soup/sauce, Ready-to-cook 792
Soyflour, protein extraction 715
Spreading machine, tea leaf 661
Starch hydrolysate, preparation process 733
Starchy chewing gum 734
Steaming process, coffee 784
Sterilization, food 663, 664
Sterilization, juice 779
Storage container (for) food 673, 674
Strawberry, preservation 729
Sugar, fermentation (for) manufacture (of) ethanol/butanol/acetone mixture 807
Sugar-added margarine, production process 707
Sugar-free chewing gum (with) polydextrose 735
Sugarless aerated confectionery 739
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